FEBRUARY 2014 | **#146** | £4 / €7 / $13

develop

GAME DESIGN | CODING | ART | SOUND | BUSINESS

WE ARE
RACING
JOIN US FOR THE ROAD AHEAD

CODEMASTERS®
codemasters.com/jobs

JOIN US
FOR THE ROAD AHEAD

WARWICKSHIRE

PRINCIPAL SYSTEMS PROGRAMMER
PRINCIPAL NETWORK PROGRAMMER
LEAD AUDIO PROGRAMMER
PRODUCERS
DESIGNERS

BIRMINGHAM

EXPERIENCED PROGRAMMERS
SENIOR PROGRAMMERS
DESIGNERS
PRODUCERS
ART MANAGER
EXPERIENCED AUDIO DESIGNER

GET IN TOUCH
recruitment@codemasters.com

FULL DETAILS
codemasters.com/jobs

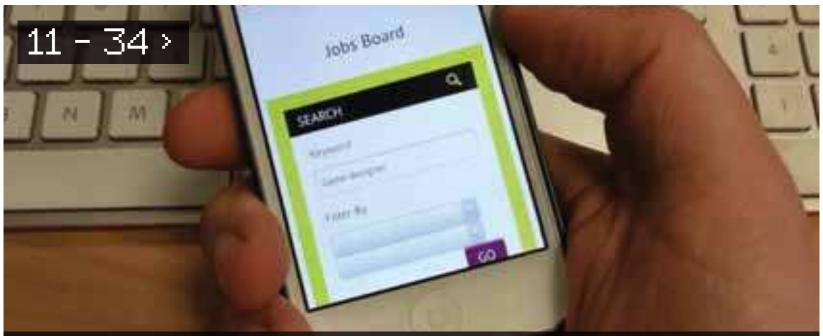
FIND OUT MORE ABOUT CODEMASTERS
codemasters.com/blog

twitter.com/codemastersjobs
facebook.com/codemastersjobs

CODEMASTERS®

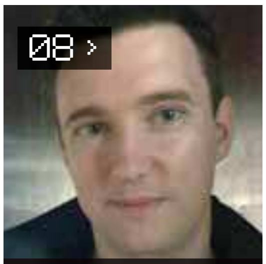
develop

ISSUE 146 FEBRUARY 2014



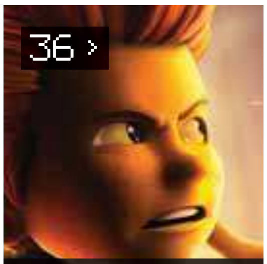
11 - 34 >

RECRUITMENT SPECIAL
Our 23-page guide to getting a job in games development, packed with industry advice – plus the results of our annual salary survey



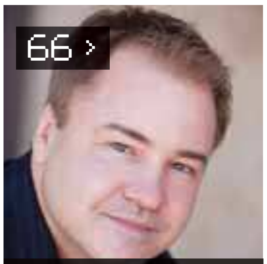
08 >

ALEX WARD
His first *Develop* column



36 >

PRESS PLAY
From indie to in-house



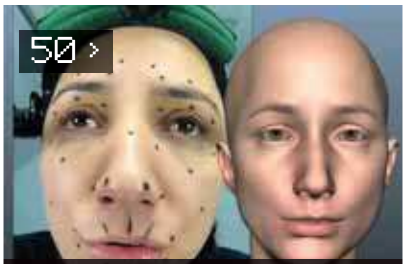
66 >

ZAMPELLA
We grill Respawn's CEO

Employee
HOT SEAT
NEW ON #DEVELOPJOBS

41 - 47 >

#DEVELOPJOBS
Introducing our new monthly guide to the best games jobs available



50 >

SYNCHRONICITY
Performance capture experts unite

REGULARS

Develop Diary P06
Opinion and analysis P08
Key release P55
Heard about P57
Directory – Spotlights P62
FAQ P66

EDITORIAL

INSIDE JOBS

TODAY, IT'S EASIER than ever to go it alone and develop games independently, but it's still worth considering a career at a more established studio – particularly if you're new to development.

There is no greater way to gain experience in this or any other industry than by working alongside peers and mentors that have been doing their job far longer than you. Even without the formality of training sessions and internal seminars, you can hone your skills by following the examples of those on your team.

It's not like there aren't many opportunities out there. Stories of studios searching for more staff have been running almost daily on the *Develop* website, and not just the little guys – Obsidian Entertainment, Sports Interactive, Avalanche Studios, Ninja Theory, Arkane Studios and Guerrilla Cambridge are just some of the companies looking for the future stars of games development. Even publishing giant Ubisoft has launched a graduate scheme for its global empire of studios, trying to snap up the best talent before it's even had a taste of day-to-day studio life.

Such a vast array of career options can be confusing. Fortunately, this issue of *Develop* is dedicated to all things recruitment, helping you decide the next move for your development career.

Our special begins on page 12 with the results of our annual salary survey, followed by a roundtable with leading recruiters on page 16, detailing exactly what hiring studios are looking for.

Then page 41 marks the start of #DevelopJobs, our new monthly section dedicated to the games jobs market.

The New Year often prompts us to question what the next step in our career is. Whatever answer you find, the *Develop* team wishes you the best of luck. Happy hunting.

James Batchelor
james.batchelor@intentmedia.co.uk

James

RENDERING ENGINEERS WANTED
tellmemore@playground-games.com

Majority of UK developers attracted by overseas work

Develop's annual salary survey raises concerns on industry overtime, crunch development and quality of life for staff

by Craig Chapple

THE MAJORITY OF games developers in the UK are attracted by the opportunity to work overseas rather than stay in the country, according to results from the latest annual *Develop* games industry salary survey.

Hundreds of developers filled in our survey, the results of which you can find on page 12, and 59 per cent of industry professionals who answered said they were interested in potentially working abroad, while 41 per cent said they were not.

The UK game industry is famously said to have suffered from a 'brain drain' in recent years, with a number of the country's biggest studios also closing down – but often spawning new, smaller studios, with some employees also going indie.

The attraction of working overseas is not just endemic to the UK; 66 per cent of developers worldwide look to other markets

Despite UK industry trade bodies TIGA and UKIE making an effort to combat this through a number of schemes, most notably campaigning for tax breaks, the government has struggled to get approval from the European Commission on the matter, which argued there was "no obvious market failure" in the sector, and that such games are produced even without state aid.

A report last month by the department for Culture, Media and Sport also recently claimed the UK games sector shrank by nearly half in 2012 (a year before our latest survey was compiled) compared to 2011, with economic contribution falling from £946m to £540m. Employment, however, was said to have risen from 13,000 in 2011 to 15,000 in 2012, a rise of 18.8 per cent.

> **“59 per cent of UK developers are interested in working abroad.”**

It should be noted that the UK figures for developers interested in working abroad are part of a wider global trend, with 66 per cent of industry professionals around the world also interested in working overseas.

The survey also revealed a concerning trend of a large number of devs consistently working overtime, and not getting compensated for it.

Just under half of developers surveyed claimed they were expected to work overtime regularly. But despite a considerable number of developers working out of normal hours, 83 per cent have said they are not paid additionally for their overtime.

49 per cent of industry professionals meanwhile said they work between 41 to 50 hours a week, while 14 per cent claimed to have average weekly working hours of 51 to 60 hours. 34 per cent said they work between 31 to 40 hours every week, while only three per cent claimed to regularly work over 61 hours.■

New Alien game drove Creative Assembly expansion

RTS studio making a horror game is not 'strange', insists creative lead

by Christopher Dring

TALENT FROM SOME of the biggest developers in Britain flocked to Creative Assembly after rumours broke it was creating an *Alien* game.

The firm unveiled its survival horror title *Alien: Isolation* for PC and consoles last month, and the result has led to a surge in interest from top developers.

"We have hired some really experienced people," said creative lead Alistair Hope.

"The fact we were making an *Alien* game was the industry's worst kept secret. And because people knew we were making some kind of *Alien* game, it persuaded them to contact us. And when we told them it was *Alien* plus survival horror, they would respond nine times out of ten with: 'Where do we sign?'

"We had people from Rockstar, Lionhead and Ubisoft, and we were able to help those other UK developers that have closed down, so people from Bizarre and Real Time Worlds were able to join us."

Creative Assembly is best known for its *Total War* strategy series. It has never made a first-person or horror title before, and has only made three console games since the turn of the century.

But Hope insists the change in genre is not unusual for them.

He said: "We used to have no heritage in real-time strategy, and we found it very difficult to get people to believe we could make RTS games. It is natural for people to put us into boxes. But internally this isn't so strange or unusual." ■

Alien: Isolation creative lead Alex Hope believes the studio has the talent to delve into new genres

Applications open for Dare To Be Digital 2014

Scotland's premier games development competition for students returns once more

by James Batchelor

Last year's winning student teams were iKnow (top right), Mazhlele (bottom) and Team DOS (top left)

ABERTAY UNIVERSITY'S ANNUAL development competition Dare To Be Digital is geared for its 2014 run, and is now calling for entries.

Students have until Monday, April 21st to apply for a place in this popular contest. For eight weeks, they will compete with other teams to build the best new game. The finalists receive mentoring from notable UK studios.

Completed games will be showcased at the Dare ProtoPlay festival in Dundee this August, with three winning teams will be picked by expert industry judges. Selection will be based on creativity, market potential and the best use of technology. The three winners will also be nominated for the BAFTA Ones To Watch Award.

"Dare to be Digital is a life-changing opportunity for students looking to enter the industry," said Professor Louis Natanson, leader of computer games education at Abertay.

"Competition to get a place gets tougher and tougher each year, and we've seen some fantastic successes in recent years. I'd strongly encourage any student who wants to break into the games industry to apply for Dare to be Digital.

"Whether you want to join a major international company or start your own indie studio, there's no other games development competition that will give you this kind of experience and exposure."

> ***"Dare to be Digital is a life-changing opportunity for aspiring developers."***
>
> Louis Natanson

To enter, head to the official Dare website. Teams must be a maximum of five students, and will need a balance of art and programming skills, as well as someone that can handle game audio.

www.daretobedigital.com ■

Codemasters targets Romanian talent

by James Batchelor

AS UK DEVELOPERS continue to discuss the skills gap, Codemasters has identified a market packed with potential new recruits.

The racing specialist is working with UK Trade & Investment to reach Romanian IT graduates as part of its recruitment drive.

The move follows a new European Union ruling that enables Romanian and Bulgarian citizens to fully exercise their right to work in all EU nations without the need for a work permit.

Codemasters' recruitment team will be working with UKTI representatives at the British Embassy in Bucharest.

"The IT and development sector is the only industry in Romania that has registered growth in recent years and the country has a wealth of programming talent, with some 3,000 IT graduates every year," said talent acquisition manager Simon Miles.

"We'll be talking to the team at the Embassy about Codemasters and the positions it can offer to those currently working in Romania's development sector who are looking to move to the UK.

"We will be hosting meet-and-greets in Budapest for individuals that are interested in finding out more about working at Codemasters' BAFTA-winning studios in the UK."■

The Develop Quiz: coming to a town near you

THIS YEAR, THE Develop Quiz is breaking out of London and travelling around the UK to challenge more studios than ever before.

The first of our new regional quiz nights will be held in Royal Lemington Spa, Warwickshire on Wednesday, February 26th. It will be held in The Duke pub, and will, as always, test the wits of dev teams to their very limits.

The cost of entering a team – a maximum of five people – is £249 and, as with the London quiz, this entitles you to a free bar and hearty pub grub. To book your place, contact Kathryn.Humphrey @intentmedia.co.uk.

There are also sponsorship opportunities available.

To find out more, please contact Alex.Boucher @intentmedia.co.uk or call him on 01992 535647.

There are more regional Develop Quiz nights in the works, and the event will also be returning to London later this year. If you have a suggestion for a potential venue, drop a line to James.Batchelor @intentmedia.co.uk■

develop iPad

Videos are available within the iPad edition of Develop on iTunes and the browser-based Digital Edition, which can be accessed at develop-online.net

develop
BETA
App attack!

THIS MONTH

Check out the groundbreaking new tech featured in this issue's BUILD section.

Watch the Synchronicity tech demo in action.

P50

Zero Dependency talks us through the Chimera engine.

P52

Listen to the beautiful sound of *Tearaway*.

P57

Sponsored by

DEVELOP DIARY

Your complete games development events calendar for the months ahead

DIARY DATES

DEVELOP QUIZ
February 26th
Leamington Spa, UK
www.develop-online.net

FEBRUARY 2014

ICE TOTALLY GAMING 2014
February 4th to 6th
London, UK
www.icetotallygaming.com

APPS WORLD NORTH AMERICA 2014
February 4th to 6th
San Francisco, USA
www.apps-world.net/northamerica

DICE SUMMIT 2014
February 4th to 6th
Las Vegas, USA
www.dicesummit.org

ANIMEX FESTIVAL 2014
February 10th to 14th
Middlesbrough, UK
animex.tees.ac.uk

CASUAL CONNECT EUROPE 2014
February 11th to 13th
Amsterdam, Netherlands
europe.casualconnect.org

MARCH 2014

SXSW INTERACTIVE 2014
February 7th to 11th
Austin, USA
www.sxsw.com/interactive

GAME CONNECTION AMERICA 2014
March 17th to 19th
San Francisco, USA
www.game-connection.com

GDC 2014
March 19th to 21st
San Francisco, USA
www.gdconf.com

NEXT MONTH'S ISSUE

Develop #147 – March 2014

RISE OF THE MICROCONSOLE

In the wake of GameStick, Ouya, Shield and the rest, experts cast an eye over what opportunities the 'non-soles' offer developers.

GDC SURVIVAL GUIDE

Everything developers need to know about getting the most out of this year's Game Developers Conference, including a full schedule of panels and sessions, tips from show veterans and advice on how best to present your projects to new partners.

GUIDE: ART SOFTWARE

The best art and design software available to help you shape the vision of your next blockbuster game.

WORKING WITH HTML5

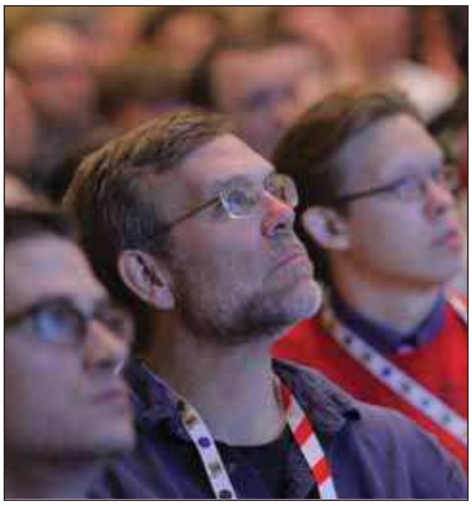
Web and mobile developers are championing the opportunities HTML5 creates for making games for multiple platforms, but are there limits to its potential?

LINUX: THE UNSUNG HERO?

With Steam now backing the ambitious OS, *Develop* speaks to the champions of Linux to find out why it is so appealing.

REGION FOCUS: SCOTLAND

Develop investigates the United Kingdom's northern reaches, home to the makers of *GTA V* as well as a growing cluster of promising independent studios.



COMING SOON

XBOX
PlayStation

DEVELOP #148
APRIL 2014

- Get your games onto next-gen
- Xbox One vs PS4: Developers' verdict
- A guide to self-publishing
- Cloud gaming
- Guide: Engines
- Region Focus: France

DEVELOP #149
MAY 2014

- Free-to-play games
- QA and localisation focus
- Web development
- Guide: Free middleware
- Guide: Graphics and rendering tools
- Region Focus: East Coast US

For editorial enquiries, please contact James.Batchelor@intentmedia.co.uk
For advertising opportunities, contact Alex.Boucher@intentmedia.co.uk

AT A GLANCE

FEBRUARY 2ND
World Wetlands Day
From boggy swamps to sweltering mangroves, take advantages of wetlands.

FEBRUARY 7TH
Fable Anniversary
Lionhead's rekindles its Xbox action RPG for the 360 with impressive results.

FEBRUARY 10TH
Animex Festival 2014
This festival of animation and games features talks from Rare and Marvel.

FEBRUARY 24TH
Mobile World Congress 2014
The mobile industry arrives in Barcelona for its annual product blow-out.

FEBRUARY 26TH
Develop Quiz
The Develop Quiz heads to Leamington Spa for the first time.

FEBRUARY 28TH
Thief
Eidos Montreal's bandit breaks cover. But will he reclaim the stealth action mantle?

To find out more about Deep Silver's publishing, marketing and promotional services, go to **www.deepsilver.com**

NEED
MORE
PIXELS?
GRAPHINE
TAKES YOU
FURTHER

GRAPHINE
WWW.GRAPHINESOFTWARE.COM

FINE-GRAINED TEXTURE STREAMING

Graphine's fine-grained texture streaming and texture compression middleware, **Granite SDK**, minimizes loading times, storage size and memory usage, while allowing the use of massive amounts of unique texture data. **Granite SDK** supports virtual texturing as well as classic texture loading approaches.

Graphine is a Belgian start-up that stems from the Multimedia Lab at the University of Ghent. By combining its academic roots with industry experience, Graphine develops rock-solid middleware for the gaming and visualization industries.

www.graphinesoftware.com | +32 (0) 924 70105 | enquiries@graphinesoftware.com

Variable declarations

//COMMENT: HERITAGE

How games still don't really get on TV

Alex Ward calls for a closer look at the history of the UK games industry

Alex Ward wants TV programmes like Charlie Brooker's 'Videogames that Changed the World' to focus more on the developers behind the games, rather than just the big blockbusters

LIKE EVERYONE ELSE, I sat and watched Channel 4's evening of television devoted to our industry at the start of December.

First up was Charlie Brooker detailing his top pick of games which changed the world. Then *Indie Game: The Movie*, something I'd been told to watch by a few different people since it came out online.

Whilst I was pleased to see Jeff Minter on TV discussing gaming, I did find the rest of Brooker's show a bit annoying. Maybe it's just me, but one thing I'm really passionate about is hearing about how games arrive into this world. Creators like The Yak are my heroes. It was reading about him in *Personal Computer Games* back in 1983 that inspired me to want to make games for a living. So, if I had to put out a programme talking about great video games, he'd definitely be on my list.

What I didn't understand was why it needed to feature so many comedians and television presenters talking about games. It doesn't seem to happen on a programme about, say, the history of Motown, or, as I watched recently, the history and use of music in Hollywood. Those TV shows naturally feature the talented people who actually did the work: the writers, the composers and the musicians.

But when it comes to gaming, we got a load of comedians saying that they, too, had a ZX Spectrum once. It didn't really tell me anything, and I don't see this happening elsewhere when television covers other creative topics.

> **"*The UK has played an key part in the growth of gaming , and I believe that this distinctly English tale needs to be told.*"**

The UK has played an incredibly key part in the growth of gaming globally, and I believe this distinctly English tale needs to be told. There's more to gaming than *Mario, Lara Croft, GTA* and *Call of Duty*. But those seem be the only ones that go on TV. Or maybe those are the only ones that supply quality game footage in time? I would love to watch a programme that told the story of the UK industry.

I want to hear the hardware makers of their day reflect on their work: the guys from Sinclair Research, Acornsoft, Dragon Data, and maybe even the Konix MultiSystem team.

I want to hear the stories from the British software houses of the day: Ocean Software, Ultimate, Gremlin Graphics, Alligata, US Gold, Quicksilva, Psygnosis, and Sensible Software – from both the business side and the coding outfits that gave them games. Where were David Ward, Chris and Tim Stamper, Ian Stewart, David Palmer, Geoff Brown, Rod Cousens, Ian Hetherington or Jon Hare?

Where were the coders? Along with Minter and David Braben, there is also Tony Crowther, Archer Maclean, the Pickford Brothers, David Darling or Philip and Andrew Oliver, Geoff Crammond and more.

BEYOND THE HEADLINES

I want to hear from the press too, from the early days of EMAP's *Computer and Video Games* to the rise of Newsfield's *CRASH* and *ZZap!64*. I was puzzled to see Gary Whitta on that programme, who is a successful screenwriter today. But why not Gary Penn, or Steve Jarratt, Paul Davies, Richard Leadbetter or Joao Sanches? All of which are smart writers who have something to say about the world of gaming.

All in all, I want to hear from the British talent that helped take gaming from where it was then to where it is now. Surely that would be more interesting and relevant than a few funny soundbites from the current crop of comedians. These stories need to be told so that more people can learn and understand about the industry.

And today, the UK is still an integral part of gaming with innovative small teams scattered around the country making titles for everything from the PlayStation 4 to the Raspberry Pi, so I'd love to see and hear from these guys too.

When I grew up in the 1980s (although to be honest, I don't think I'll ever be a grown-up) computers and computer games were on TV a lot more.

From *Making the Most of the Micro* and *Tomorrow's World* to *GamesMaster* and *Bad Influence*, you'd be able to get excited about something new and think about what will be possible in the future.

That's what we need to do: inspire the next generation. And television is a great way to do that. It's just a shame that it isn't covered in any great detail.

Alex Ward is the ex-creative director of *Burnout* developer Criterion Games, which he set up with co-founder and studio director Fiona Sperry. The duo recently left the studio to form a new games company.

//COMMENT: BUSINESS

The best of all worlds

Rick Gibson debates the practicalities of bringing your game to every possible platform

THE YEAR'S END is traditionally the time for crystal ball gazing, and at a recent conference, an investor was asked what he wanted from the industry. His request – a game playable, albeit lightly, on all devices – struck an old nerve, one adjacent to dreamy prognostications about convergence to a single über-device, an end to the console generations or the demise of publishers.

In this day and age, can your game be everywhere at once? Is that cross-media, multi-platform ideal deliverable, commercially viable or even strategically a good idea?

For starters, it's never a bad idea to dream big, which reminds me of Michael Acton-Smith's napkin. He tells the story of drawing the *Moshi Monsters* concept on napkins in a London café. With characteristic chutzpah, he envisioned a cross-media franchise centred on the virtual world, orbited by video games, toys, books, a magazine, TV shows, trading cards, mobile and retail figurines.

> ***During the last console cycle publishers discovered that one size-fits-all releases were low quality and poorly received.***

Remarkably he delivered these, but several years after launch and only with the pre-requisites of an increasingly global brand, millions of users, tens of millions in marketing expenditure, and hundreds of staff. Although he licensed much of his non-virtual world activity to third parties, such expansions would have been impossible without these conditions. He had to pick his battles.

For small companies – most British games companies – choice of platform isn't a tactical decision, it's a strategic one. Extending onto another platform can tie your staff down for months and could dictate your survival. It's rarely just about what is technically possible.

Platform choice raises many questions with deeper implications. How long will it take to deliver a top quality product that suits different platforms and form factors? How do you market and distribute on different platforms? How do you service the requirements of their different consumers? How do you adapt commercial models and thus the game itself? How do you scale your team?

CHOOSE YOUR BATTLES

The answers to these questions vary so wildly for each platform and market that the only option is to limit how many you support. Even the biggest publishers will usually only be willing or able to cover some of the major platforms for a single brand. Through trial and error during the last console cycle, they discovered that one-size-fits-all releases were lower quality and thus poorly received, which was fixable only by using discrete teams working on platform-specific SKUs, usually on larger platforms with low risk of cannibalising the cash cow.

Being everywhere for the sake of it is beyond the reach of most studios, who sensibly focus on two or perhaps three closely related platforms. Opportunities abound and there's nothing wrong with being agile and open to new platforms, but the chance of leading a new market is low and risks stretching finite resources.

There's a reason why no-one has actually realised the investor's dream of being all things to all men. It's not clear that consumers actually want universally playable games. Plenty have had grand ambitions to create write once/run everywhere games but many have failed.

Similarly, several broader multi-platform initiatives have failed. Microsoft promoted cross-platform development using XNA before killing a platform that had failed to track the market.

This investor's future-gazing was dangerous only if it persuaded studio heads looking for funding that they must start spreading themselves across all platforms. By all means think big. But for most, when it comes to platform choice, it's focus or fail.

Targeting as many platforms as possible may not make creative or business sense without due care and attention, says Rick Gibson

Rick Gibson is MD of Ludifi, a studio that makes video interactive and playful. **www.ludifi.com**

//EXTRA CONTENT ONLINE

"I feel that the big three have not opened up enough, or in the most beneficial ways to true indies. So as cool as consoles are, until I feel that some of this has changed, I'll stick to my guns."
Ashley Gwinnell, Force of Habit

"A designer who uses visual aids such as diagrams, sketches, flowcharts, and reference material will find others can more readily understand their vision. This applies for almost all types of design work."
Phil Mansell, Jagex

"If you want to be a designer, make sure that your course doesn't just have you writing design documents. You should be doing hands-on development work with a range of engines and tools."
Gabrielle Kent, Teeside University

To see all of our reader blogs visit: www.develop-online.net | Email craig.chapple@intentmedia.co.uk to contribute your own blog

GOODGAME STUDIOS

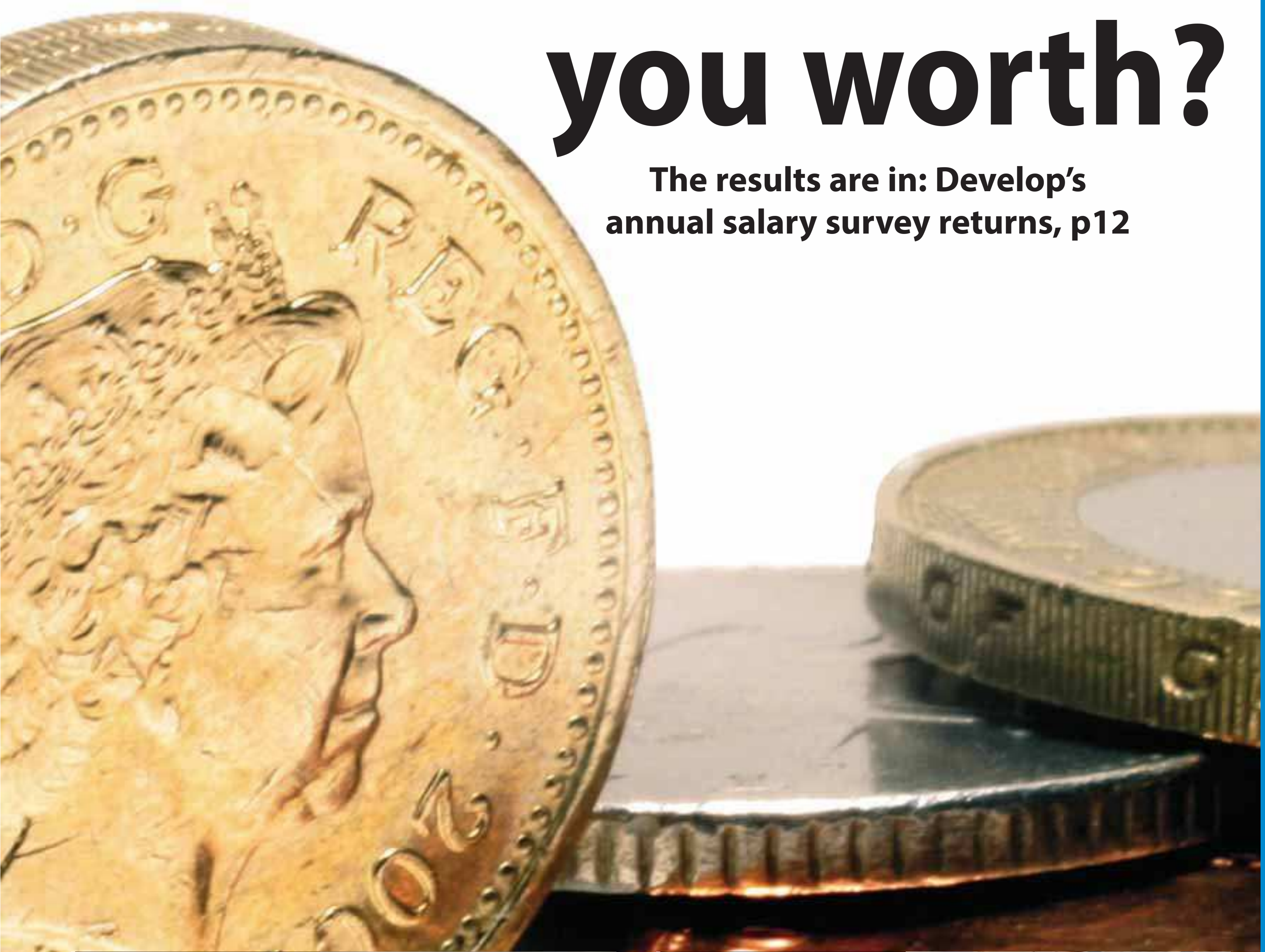
WE'VE GOT THE
GOOD
JOBS.

goodgame-jobs.com

Press Play: From indie to in-house p36

What are you worth?

The results are in: Develop's annual salary survey returns, p12



Talent hunters reveal their secrets p16

The A to Z of games recruitment p22

Salary survey

After hundreds of developers filled in our salary survey, we've crunched the numbers to investigate whether new platforms, business models and the rise of indies have caused havoc on staff earnings

Average global games development yearly salary:

£32,500

THIS YEAR, OUR salary survey shows a decline of over £1,600 in the average global games developer annual earnings.

Last year we reported the number at £34,183. This year we have calculated the figure at £32,500, a significant drop.

The decline is likely down to a slump in the UK games market, and the rise of the indie development scene. Of the 380 developers who responded to our survey and included their salary, 145 (38.2 per cent) of those said they belonged to an 'indie company', while 235 (61.8 per cent), said they were part of a big firm.

To ensure the results were reflective of industry salaries, we took out income below £14,000, and studio head and executive salaries over £100,000.

> ***"The decline is likely down to a slump in the UK games market, and the rise of the indie development scene."***

Including all entries, such as part-time indies who reported relatively low earnings and those at the top-end of the scale, the median average 'salary' for developers falls to £31,856.

Interestingly, the mean average for developers across the globe is £37,104 – up from 2012's figure of £36,523.

Despite a lower average salary than the past two years for developers around the globe, it is still up from 2011's low point of £32,203.

To calculate the results, we asked readers of *Develop* and sister title, *MCV*, to submit details on their job earnings, as well as answer questions on their feelings about the future, working hours and job satisfaction.

687 devs filled in the survey. Of these, 442 were from the UK (just short of last year's total).

> **These stats reveal an industry in desperate need of avoiding 'crunch' development, and ensuring developers are rightly rewarded for their time and sacrifices.**

The adjacent annual salary amount was calculated using a median average to ensure senior contributors did not distort the results, such as those well-paid execs.

Despite a drop in the average global annual developer salary, the total is up from the average game industry pay. Including those from publishing, services and retail sectors. Again without those well-paid execs and indies with relatively small earnings, the world average median salary is £30,896. This is lower than last year's £32,008, but still up from 2011's low of £28,932.

So while the average salary may have dropped, in part due to an apparent contraction of the UK industry, the development sector is still coping better ▶

ART

Global Average

Lead artist	£34,871
Artist	£30,074
Junior artist	£18,495

UK Average

Lead artist	£36,927
Artist	£28,818
Junior artist	£19,143

AUDIO

Global Average

Lead audio	£55,385
Entry-level audio role	£25,328

UK Average

Lead audio	£58,166
Entry-level audio role	£28,083

CODING

Global Average

Lead programmer	£46,912
Programmer	£35,839
Junior programmer	£21,402

UK Average

Lead programmer	£48,938
Programmer	£33,617
Junior programmer	£21,538

DESIGN

Global Average

Lead designer	£40,279
Designer	£27,479
Junior designer	£18,982

UK Average

Lead designer	£38,590
Designer	£26,375
Junior designer	£18,236

PRODUCTION

Global Average

Lead producer (Internal)	£57,170
Producer (Internal)	£33,179
Production director	£65,562
Production co-ordinator	£41,315

UK Average

Lead producer (Internal)	£56,667
Producer (Internal)	£32,693
Production director	£61,750
Production co-ordinator	£26,000

QUALITY ASSURANCE

Global Average

QA lead	£22,891
QA role	£14,673

UK Average

QA lead	£22,700
QA role	£14,393

MANAGEMENT

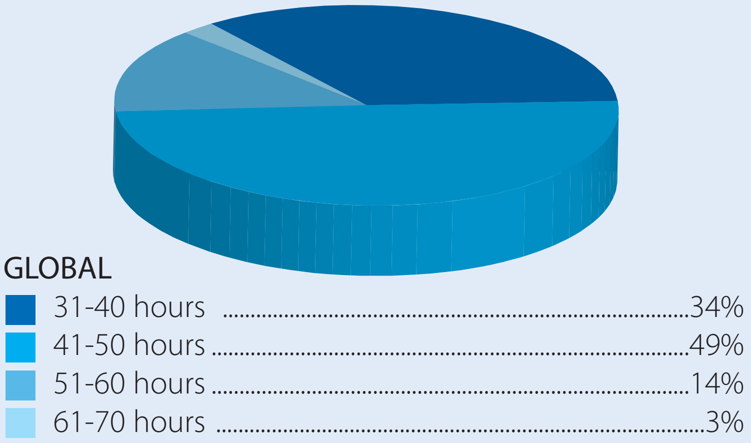
Global Average

Managing director/Studio head	£90,704
Creative director	£79,333
Development director	£57,031
Business development	£44,976

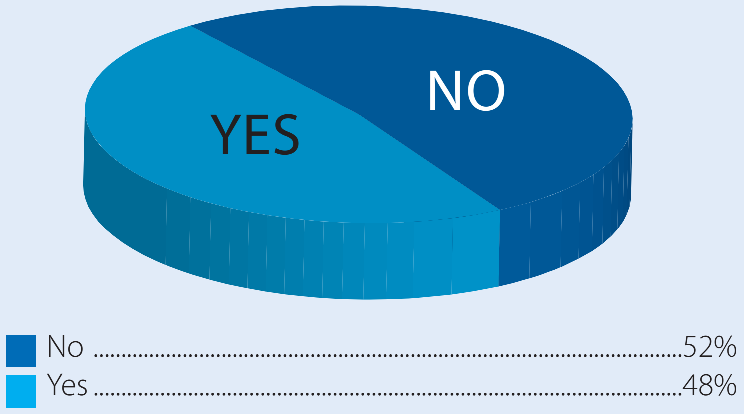
UK REGIONAL BREAKDOWN

Scotland	£27,622
North West	£29,320
North East	£30,697
Yorkshire & Humberside	£25,112
West Midlands	£30,985
East Midlands	£27,125
East of England	£30,109
South West	£31,353
South East	£33,347
London	£39,426

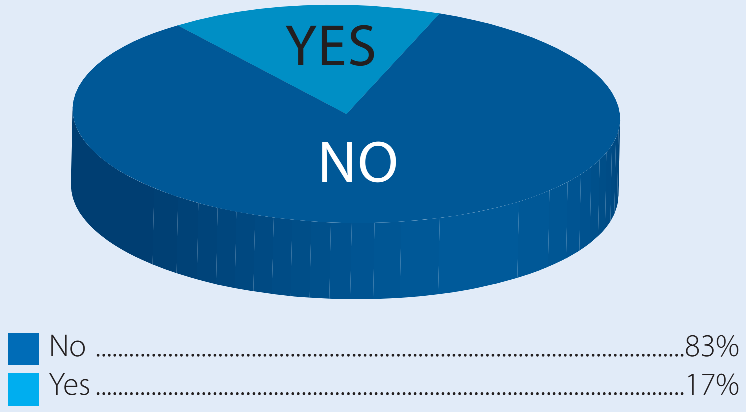
Average working hours



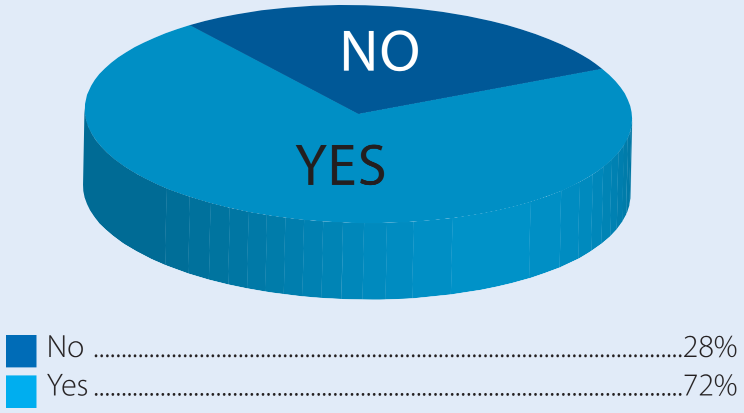
Are you expected to work overtime regularly?



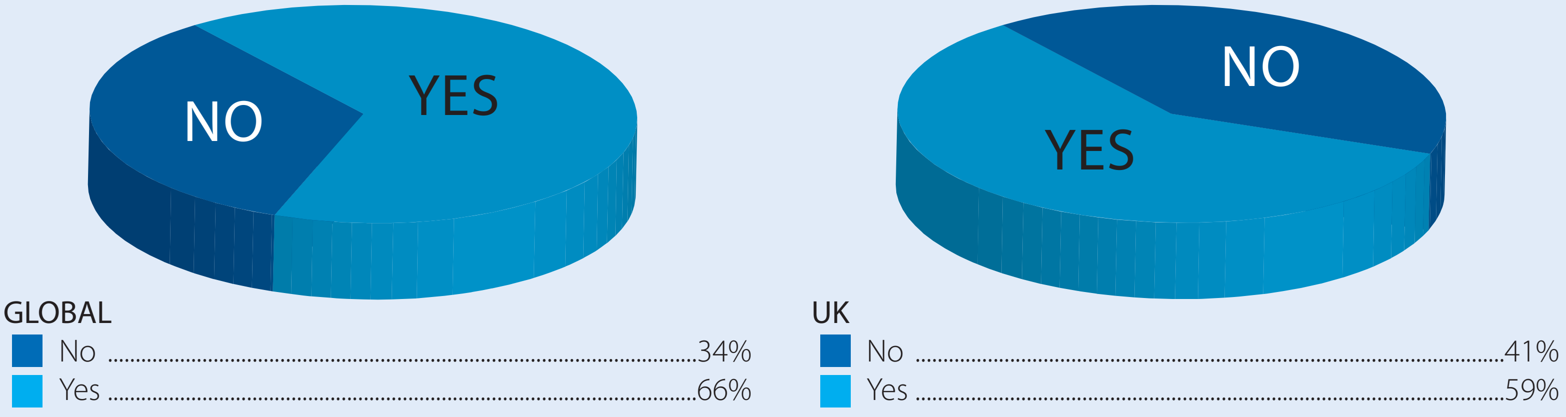
Are you paid additionally for overtime?



Are you feeling confident about 2014?



Are you attracted by the opportunity to work overseas?



▶ than its counterparts despite sea changes in the way it operates.

Though the average salary may be dropping, is the amount of work developers are expected to do rising? We asked industry professionals what their average weekly working hours, and of the 355 who answered this question, half said they worked between 41 to 50 hours per week. A further 58 developers said they worked more than 51 hours each week.

176 developers (48 per cent) stated they were expected to work overtime regularly, and a surprising 83 per cent said they were not paid additionally for overtime.

These stats reveal an industry in desperate need of avoiding 'crunch' development, and ensuring developers are rightly rewarded for their time and the sacrificing quality of life through such lengthy overtime. It should be noted that some who said they aren't paid overtime may not work out of hours.

With the UK struggling to kick-start its tax breaks as the industry awaits approval from the European Commission, the worrying 'brain drain' trend – talent both old and young heading out of the country – could be set to continue in the meantime.

59 per cent of UK developers said they would be interested in working overseas. Globally, however, a similar trend is emerging, with 66 per cent in total saying they would be interested in getting a job abroad.

Despite the crunch, lower average salaries and overseas temptations, most devs appear happy with the industry and feel confident about 2014 – 72 per cent of them, in fact. ■

MAKE YOUR OWN HISTORY

We're looking to add to our team of driven and talented professionals, to help us create the world class gaming experiences that we're famous for. If you have the skills, experience and passion for games to match ours, we want to hear from you. Visit our jobs page for more information on all our open positions.

www.creative-assembly.com/jobs

The hunt for talent

Finding the right recruits for your studio is tough, but are managers truly aware of how important the hiring process is? Develop brought together recruitment experts to share secrets about competing for applicants, retaining employees and how aspiring developers can get that dream job in the games industry

Prominent recruiters from some of the biggest studios in the UK attended a Develop roundtable to discuss the games jobs market in 2014

IN 2012, VALVE released its employee handbook. The document included an interesting diagram declaring that "hiring well is the most important thing in the universe", ranking recruitment above other important disciplines such as 'writing code', 'building platforms' and 'playing *Dota 2*'.

It's a sentiment echoed by a Google presentation that was uploaded online, which also stated that recruitment is vital to the firm's future. And it's an ethos that, during a special *Develop* roundtable discussion in London last month, UK experts warned some development studios are neglecting.

"Some of the managers at studios are so focused on making their games, they don't realise that development involves recruitment as well," explains Emma Smith, HR business partner at Creative Assembly. "If they don't bring the right people in, they'll never finish their games."

Jagex's talent acquisition manager Peter Lovell adds: "Recruitment is absolutely essential to delivering a great finished game. And that isn't just about screening CVs and conducting interviews; it's making sure the candidate leaves with a good impression of the studio, even if they weren't successful – all the stuff you do around recruitment is so important.

"Some hiring managers can let that all fall apart, and it's horrible for recruiters because it's painstaking to do all that work bringing a candidate in. If hiring managers ruin that, bad hires get made. The cost of that's absolutely enormous and you find yourself back at square one again."

Unfortunately, even studios that dedicate themselves to recruitment face another problem: competition for talent.

EXTERNAL TEMPTATIONS

Graduates who have the skills needed for games programming and other areas of development are increasingly aware that this knowledge is highly sought after by companies outside the games industry, often promising higher salaries and swankier working conditions than your average studio.

> ***"Recruitment is absolutely essential to delivering a great finished game. The cost of bad hires is enormous."***
>
> Peter Lovell, Jagex

"We're going for the same computer science applicants as Google," said Reflections' talent and communication manager Lorna Evans. "And Google can fly them to San Francisco in a Learjet, and pay them just as much. We just can't compete with that."

Lovell adds: "Investment bankers are a big problem for us in Cambridge. We spend so much time and effort trying to convince computer science graduates to come to us rather than investment bankers, but you just get blown out of the water."

Even if candidates are content to stay within the industry, the unstable nature of the games development landscape makes attracting talent that is already employed far more difficult than it used to be.

"If you're looking for experienced people, they're likely to be in their 30s or 40s and they'll have a family," says Evans. "They won't want to move from one end of the country to the other with three children because that's a huge risk when the reality is that sometimes companies go bust."

Lovell concurs, adding: "Particularly when their current employer will do anything to retain them. You end up in bidding wars over certain candidates, and that can be damaging too. It's killing internal salary bandings; you never know where to position people and we often end up giving up on the new candidate."

Smith agrees: "It causes a huge knock-on effect. The war for talent is still raging."

CROSSING BORDERS

The answer many studios have found is hiring from abroad. With so many companies fighting over so few viable UK applicants, the likes of Russia, China, Bulgaria and Romania can comfortably fulfil a developer's needs.

"The reality is that the skills we need aren't in the UK," says Evans. "We are all talking to

Russia, South America, and Bulgaria because we need the best people to make the best next-gen games."

Codemasters' talent acquisition manager Simon Miles agrees: "Romania's another great example. It produces 3,000 IT graduates every single year and people like Oracle, Microsoft and IBM cottoned on to that years ago. Even Ubisoft's first studio outside of France was in Bucharest and they have more than 800 people in that studio now. A lot of us are just catching up on this.

> **"*The skills we need aren't in the UK. We're all talking to Russia, South America and Bulgaria because we need the best.*"**
>
> Lorna Evans, Reflections

"The difference is these Eastern European countries are still teaching traditional programming and computer science. They don't have university courses that have games in front of them; they have programmers who decide they want to make games.

"We had a guy for an interview that spent three quarters of a day fixing problems in our code. He's now chained to that desk. That's exactly the type of person we're looking for."

However, bringing in new talent from overseas is far easier said than done. The UK's strict border control policies and lengthy visa application process can scupper any hire before the applicant even arrives.

"There are 11 pieces of documentation that have to be provided in China before they can get a visa to come for an interview," Smith offers as an example. "And you can get around that with Skype for the interview, but we need them to be on site for the C++ test.

"Sometimes there are only 30 to 40 people in the world that can fill the senior role you have. It's tough finding where they are, whether they want to move, and whether or not they can get a visa."

Lovell adds: "It's just as tough when you've already found someone in, say, Canada, because then you have to retroactively deal with the compliance issues so you can make a case to the Home Office.

"You have to have advertised at Job Centre Plus, on your own website, in industry press for 30 days, then process any applicants from the UK fairly – and all the while you're keeping the individual you want to hire waiting for three months, sometimes more. And that's if someone doesn't snap them up first, or they decide to stay where they are.

"And even if they make it over here, sometimes the individuals joining the company might never have been to the building or the local area and, as has happened in the past, they realise that it's not the place for them."

▶

OUR EXPERTS

BEN HARRISON

Position: HR & recruitment manager
Company: Sega Europe/Sports Interactive
Recruiter since 2005

www.sigames.com/studio/careers.php

PETER LOVELL

Position: Talent acquisition manager
Company: Jagex
Recruiter since 2006

www.jagex.com/careers

EMMA SMITH

Position: HR business partner
Company: Creative Assembly
Recruiter since 2009

www.creative-assembly.com

SIMON MILES

Position: Talent acquisition manager
Company: Codemasters
Recruiter since 1998

blog.codemasters.com/category/careers/

LORNA EVANS

Position: Talent and communication manager
Company:
Reflections, A Ubisoft Studio
Recruiter since 2012

reflections.ubisoft.com

ERIN TURNBULL

Position: Recruitment and HR co-ordinator
Company: Eutechnyx
Recruiter since 2010

www.eutechnyx.com/recruitment

Attending events, such as the Develop Conference (above), can give aspiring developers the upper hand: it shows dedication to their career goals, and allows them to gain contacts within the games industry

Ben Harrison, HR and recruitment manager for Sega Europe and Sports Interactive, tells a similar story of a Russian programmer that brought his whole family over to the UK.

"He's amazing at what he does but he's actually going back home now because the UK education system isn't good enough for his family," he says.

"We're losing out on talent because of things like that, and it takes longer for us as a nation to gain talent than to lose it."

THE SKILLS GAP

As both Harrison and Miles allude to, there is a deficit when it comes to the fundamental skills and knowledge that developers require, which makes filling vacancies even tougher.

"The key skill that we lack is coding," explains Harrison. "We have some good technical tests, but unfortunately nine times out of ten, the coding skills aren't there."

Evans says it's not just graduates but experienced developers that are falling short of studio expectations: "There's a huge gap when it comes to programming, even in people that have been doing this for ten years, as well as management.

"They might have the game credits, but just through a phone call you can tell they don't have experience in decision-making or fixing problems without being told how."

Smith adds: "We need strong leaders, people that are able to mentor new talent up to a higher standard so that we don't end up shutting all these fantastic studios down."

All of our experts said that, while there are exceptions, universities are partly to blame for the widening skills gap. One recruiter even cited a course that tells its students they have no need of C++.

"It's damaging and almost criminally negligent on the part of course leaders, because they are preparing a whole generation with mismatched skills," says Lovell. "We find we hire more people that didn't go to university, that taught themselves programming."

Miles adds: "One course leader I spoke to runs a three-month course on box art. Some universities are so far behind in terms of what we need, and it's because they think putting games on the course description gets bums on seats."

Evans concurs, adding that some games courses are becoming "the new Media Studies: wasting kids' money and selling them dreams that aren't going to happen".

But Eutechnyx's recruitment and HR co-ordinator Erin Turnbull offers a solution.

> ***"We need strong leaders that are able to mentor new talent up to a higher standard so we don't end up shutting fantastic studios."***
>
> Emma Smith, Creative Assembly

"We approach kids at a young age by going into schools and telling them that if they want a career in games, maths is essential," she explains. "It's a case of educating primary and secondary school teachers about what coding requires.

Smith agrees: "We've been doing that too, going out to local schools and running a project with their classes. Some of the stuff the kids come up with is absolutely brilliant, and it makes them realise maths isn't a dry subject.

"It was nice to see so many girls involved as well. They see it as something they might like to do."

WANTED: FUTURE STARS

However, Lovell warns that while a career in games development can be appealing to children, it's important not to misrepresent how much hard work is required.

"Games seems like such a popular, easy-entry industry from the outside," he says. "People think if they play *Call of Duty* for hours, they could make a better one – they don't understand there's a science behind games development. It's not a zero-entry barrier job they can get into and I don't know how we can convince them otherwise."

It's not all doom and gloom, though. While many graduates are not up to scratch and foreign hires are becoming increasingly difficult, internal recruiters still find that the UK is by no means short of creative talent. The challenge is finding the future stars that really stand out.

"We had 540 applications over the Christmas break, and we have to go through every single one individually because we don't know if they're a potential superstar or not," says Codemasters' Miles.

DO WE NEED AGENCIES?

IT'S THE ELEPHANT in the room whenever hiring is discussed: with so many publishers and developers handling job applications internally, are recruitment agencies losing relevance?

"To be honest, I'm not sure how agencies are going to keep on supplying and surviving," says Creative Assembly's Emma Smith. "We're developing our recruitment process in-house so much that we've got a wealth of CVs and contacts. I don't know how agencies are going to make any more money."

Sega Europe's Ben Harrison adds: "All of us know one or two good agencies; you give them a tough role to fill and they help you out. But it's the other agencies that are just selling, and not really thinking about what it is your company does."

Jagex's Peter Lovell says that 93 per cent of the firm's roles were hired directly last year: "We very much operate on a direct hire model because we've invested in talent pools and built a CV database that's bigger than anything games jobs boards can offer us. I don't understand why some agencies think they still have a seat at that table."

However, Codemasters' Simon Miles argues that it's because many external agencies "have far more resources to get people from other industries" than any internal recruiter.

www.sigames.com
SPORTS INTERACTIVE
SEGA

SPORTS INTERACTIVE IS HIRING

WE ARE LOOKING FOR WORLD-CLASS TALENT TO JOIN OUR PASSIONATE AND TALENTED SQUAD IN NEW AND EXCITING ROLES.

- C++ Programmers
- Junior Coder
- Server Programmers
- Platform Programmers
- Junior 3D Artist
- Junior Animator
- Database Administrator
- Assistant Business Analyst
- Business Manager, F2P
- Business Development Manager

LOCATION: OLD STREET, CENTRAL LONDON

For more info on these vacancies please visit: www.sigames.com

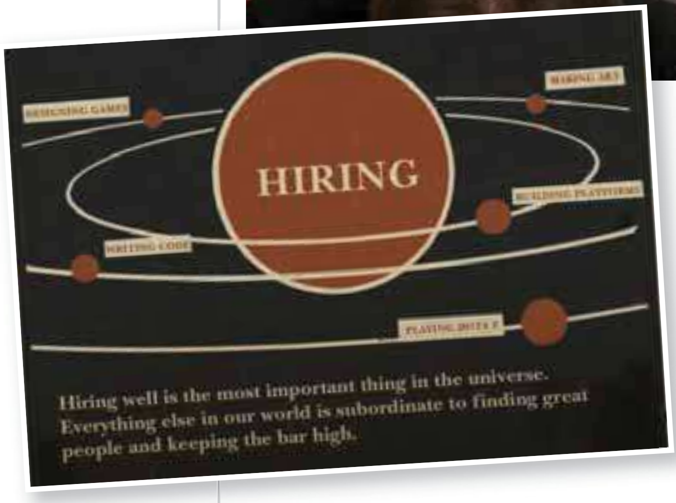
FOOTBALL MANAGER 2014

www.sigames.com

SEGA
www.sega.com

Main: Internal recruiters receive hundreds of CVs from applicants, but they only have two to three seconds to see whether or not they stand out

Below: This diagram from Valve's employee handbook illustrates the stock the firm puts in recruitment – an attitude our experts want to see more UK studios adopt



Hiring well is the most important thing in the universe. Everything else in our world is subordinate to finding great people and keeping the bar high.

"So we look for uniqueness, people who have sent us something that is out of the ordinary, rather than just a bog-standard CV.

"A great example of a bad application was a designer who sent me a letter saying it was their dream to work for the people that created *Assassin's Creed*, and they would work in any genre except racing because they find it boring.

"We want people to show that they genuinely want to work for Codemasters and research what we do. That's exactly how many of our current group leads came into our organisation."

Lovell agrees: "Standing out is key. Recruitment teams spend maybe two to three seconds per CV because we have so many. That's how long you have to convince us to put you through to the second stage.

"We're always interested in tech bods that haven't learned through ready-made tools. We like people who know how to break those systems and understand more than the basics, but that's hard to find. Most graduates rely on tools, but we need ones that can manipulate code at an almost binary level to make things happen."

It's not just technical expertise. Recruiters agree that 'soft skills' such as communication, teamwork and dealing with feedback are essential if candidates want a long career in games development.

Eutechnyx's Turnbull says: "We look for people who have a bit of commercial awareness as well: somebody who has an idea of where the industry is going as a whole, and where Eutechnyx is going."

Lovell adds: "Certainly when it comes to the more recent disciplines like mobile and tablets or monetisation and free-to-play, people with that commercial awareness go straight to the top of the pile."

SAY IT LIKE YOU MEAN IT

Finally, recruiters advise those seeking a games development job to really put themselves out there – in a quite literal sense. Attending events and careers fairs can speak volumes about how serious applicants are about entering the industry, far more so than a strong cover letter.

"Think about all those thousands of young people currently studying degrees in games design," explains Evans. "How many go to the Develop Conference? Four? So when students save up for it and travel all the way to Brighton, it stands out. Those are the sort of people we would hire."

> ***"We want people who have sent us something out of the ordinary, rather than a standard CV."***
>
> Simon Miles, Codemasters

Miles adds: "I was in the pub just before Eurogamer Expo last year. A group of 12 young people came in and I automatically knew they were gamers. So I started chatting to them, bought a round of drinks – four of them now work for us." ■

HOW TO RETAIN TALENT

ONCE YOU HAVE the applicant you so desperately needed, how do you ensure they aren't tempted elsewhere?

Sega Europe's Ben Harrison says every hire from a graduate level is an opportunity to ensure new talent stays not only within the UK but also within your company and studios. The trick is to treat them right.

"We try to make sure the benefits are right, that they have respect and rewards for what they do," he says. "Everything from a HR perspective is built towards retaining talent."

Codemasters' Simon Miles adds: "We do two game jams a year within the studio that really produce interesting results. The teams come into work absolutely buzzing because they can work on whatever projects they like. And some of the ideas that come out of that are then implemented into our future products.

"Most studios may not have the time to dedicate to things like this. To be honest, we don't but we know how important it is and how valued it makes the teams feel."

Jagex's Peter Lovell stresses that even without extra benefits and rewards, agreeable working conditions are vital to morale: "If you're an old school dinosaur that crunches their people and doesn't give them any respect, you're finished. This is the age of the internet and everyone knows people in the games industry. They'll hear stories of other, better places and they'll leave."

Miles adds: "EA keeps getting voted as the worst company in the US – but how many people work for EA? It can't be that bad."

STUDIO gobo

NOW **HIRING**

PROGRAMMERS • WORLD ARTISTS • DESIGNERS • ANIMATORS
CONCEPT ARTISTS • CHARACTER RIGGERS • GRADUATES

"GO BEYOND ORDINARY"

Disney INFINITY

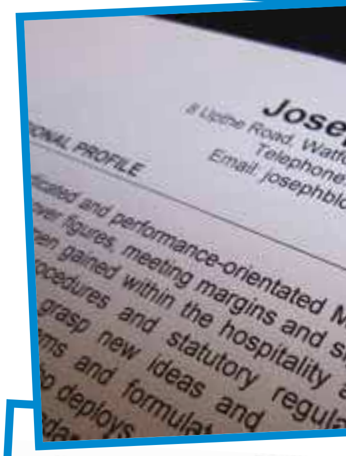
BRIGHTON | UK

CAREERS@STUDIOGOBO.COM

Copyright 2013 | All Rights Reserved | The Walt Disney Company

The A to Z of games recruitment

It's easy to be intimidated by writing or reading CVs, interview preparation, compiling portfolios, creating job descriptions and all the other obstacles the hiring process presents both applicants and recruiters. **James Batchelor** spoke to industry experts to compile this handy guide



SUCCESS STORIES OF TA
JOINING US IN THE NORTH EAST

GDC
HALLS ABC
1400

A is for Agencies

"Searching for a new job can be a frustrating and time-consuming exercise, particularly if you're in a full-time position, so it pays off to enlist an experienced recruiter to help.

"We can present you with available, relevant roles and advise you on details such as salary, closing dates, interview processes and any key points that we've picked up from hiring managers.

"We ensure that your CV goes directly to the decision makers rather than the black holes that 'jobs@.com' email addresses can often be. We'll inform you of any feedback and (hopefully) arrange your interview. We can even negotiate your offer.

"By helping you secure your dream role, we hope you'll see the benefits of using our services and think of us next time."

Simon Hope, Aardvark Swift

B is for Brighton

Brighton is a hotbed of UK talent with local studios such as Boss Alien, The Chinese Room, and Relentless Software, making it a great place to look for your next job.

Brighton firm Studio Gobo is currently looking to expand its team, following collaborations with Disney, Codemasters and Microsoft. Co-founder Jim Callin (*pictured*) told us more:

"We're looking for exceptionally talented programmers, artists, designers and producers of all levels. We offer an excellent employee package, including a share scheme, bonus and free gym membership.

"All our work is done in cross-discipline teams. We're also a very social company with a great love of food – in fact, we cook lunch for everyone in the studio every Friday."

C is for CV

A recruiter's first impression of an applicant often comes from their CV. Here's our collection of industry tips to ensure yours stands out:

- Search for examples of CV formats online to find one that will enable you to include all relevant information and details.
- Never use the same CV for every role you apply to. Make sure your CV fits the job descrption.
- Make sure it's easy to read and no longer than two pages.
- Summarise your achievements at the top, list your skills and provide a brief introduction to yourself.
- Always include a telephone number and, if possible, a link to your online portfolio.
- List the most recent experience first. This should always be listed above education.
- Never include salary expectations or reasons for leaving your current employer – it could be misunderstood.
- Check for grammatical and spelling mistakes. Thoroughly.
- Show that you want the job. Mentioning an interest in video games might not be enough. Don't be afraid to mention non-gaming hobbies and interests.
- List you achievements, not just your responsibilities – but be honest about them.
- Never include a picture.
- Don't be afraid to be creative, particularly if you're applying for a design role.
- Consider including key things you have learned and how these will contribute to the job you are applying for.
- If you're applying for a job abroad, check if there are differences in what they expect from CVs.
- Keep it concise.

BRIGHTON PIER

oh Bloggs
rd, Hertfordshire, XY12 3ZZ
07777 777 777
ggs@hotmail.com
anaging Director
gnificantly
nd to

ENTED EMPLOYEES
FROM AROUND THE WORLD.

GDC
ROOMS
1100
1200

D is for Develop

Yes, we have our own ways of helping you find the perfect job, or the next superstar to join your growing studio.

First and foremost, there is the Develop Jobs Board, found at www.develop-online.net/jobs. This includes the latest jobs listings from studios around the world across various disciplines.

You can follow the Develop Jobs Board on Twitter via @DevelopJobs, or email Alex.Boucher@intentmedia.co.uk to find out how you can get your vacancies listed.

You can also find a series of guides for both job seekers and recruiters online as part of our New Year, New Job special. Check them out at www.develop-online.net/Jobs2014.

And if you turn to page 41, you'll find our new #DevelopJobs section: a seven-page guide to the month's recruitment news. As well as reporting on the latest dev staff shuffling at major developers, this section gives you an insight to what companies are looking for with Recruiter Hot Seat and Get That Job, plus new feature Employee Hot Seat.

E is for Eutechnyx

"At Eutechnyx we think the whole team can be involved in recruiting world-class talent. What better way to promote our studio to potential new employees than to publicise the success stories of our team?

"Our employees shared their journey – relocating to the North East, fast-tracking their careers, global travel opportunities – and it's all captured in our #IDidItHere campaign. This highlights why Eutechnyx is a great place to work, as well as featuring the North East as a great place to live and a hub of games industry talent.

Our official #IDidItHere webpage tells the story of some of our staff, but the #IDidItHere Twitter hashtag belongs to everyone. Check it out for tweets from the team, updates on the social side of working at Eutechnyx and pictures from around the world by members of staff traveling on business."

Erin Turnbull, Eutechnyx

F is for Fashion

They say the first bite is with the eye, and this can be just as true when studios bring in applicants for a job interview. So here's our round-up of industry fashion tips for making that great first impression:

■ Don't be afraid to ask what the dress code is before the interview. Underdressing can seem disrespectful, but overdressing just makes you look silly. Suits are almost never required.

■ The games industry often describes its dress code as "smart casual". When in doubt, too smart is always better than too casual.

■ Look at the company's website or Facebook. Photos of the team at work should give you an idea of appropriate attire.

■ Whatever you wear, look tidy so your prospective employer knows you have made an effort.

■ Make sure whatever you wear is comfortable – there's enough discomfort to worry about when you're being interviewed.

■ Don't wear something that distracts the interviewer from what you're saying. Your skills are more important than your dress sense.

■ Wear a smile. Go in comfortable and confident to make the best first impression.

G is for GDC

"The Game Developers Conference has a long tradition of connecting developers with potential employers. It's the one time of the year where the entire industry is gathered to learn, network, and inspire.

"Our Career Centre plays host to over 40 of the industry's top publishers and studios focusing on a wide range of platforms and verticals including console, online, mobile/tablet, free-to-play, indie, and more. Here, attendees can meet directly with hiring managers, present portfolios/CVs, and get advice on finding the right career path.

"We also run the Game Career Seminar. The main seminar takes place on our Student Day (the Friday of GDC) with lectures aimed at breaking into the industry. We also have a portfolio review panel judged by industry professionals.

"This year, we're adding a Game Career theatre to the Career Centre with lectures focused on high-level career development."

Megan Scavvio, GDC

H is for Hiring the right staff

"When looking to hire an applicant, companies will focus first on skills and secondly what value the applicant can add to their business, but there are other points that are just as crucial to consider.

"For instance, once you have found the right person in terms of having the necessary skills to complete the job, you then need to see if they are a 'cultural fit' within your company. There have been many examples of businesses hiring a new member of staff that have clashed with the current team in terms of different personalities and approaches.

"This then creates a new problem within the team and can cause unbalance and mistakes to be made. Therefore it is always important to not only assess the person's skills but to also have them meet existing staff to see if they will be a good addition to the team. We find that character referencing is a good feature to add to the process."

Eamonn Mgherbi, Avatar Games

I is for Interview

The interview is perhaps the most vital part of the job application process. If your CV opens the door, the interview is your last chance to stop prospective employers from slamming it in your face. Here's how you stop that from happening:

- Research the company – its services, products and competition – as thoroughly as possible. This will allow you to sell yourself better in the interview.
- Research the common and average salaries for your position, and other roles in your field, before going in. This means that when they are about your salary expectations, you can make an informed assesment.
- Don't forget vital skills like a good, firm handshake, maintaining eye contact and listening carefully to the person conducting the interviewer.
- Ask questions. It shows you are enthusiastic to find out more about both the job and the company.
- It's okay to admit you've made mistakes in the past – everyone has. The trick is to explain how you learned from it. Think back to feedback from your last performance review if you're stuck.
- Feel free to be honest about why you're leaving your current job, but be mindful of what you say. If it is centred around a personality conflict, don't bring personal dramas into it; just explain how you have learned from the situation.
- Look up some of the more common interview questions that come up, or ask someone that went through a similar process. Think about how you can make your answers unique and specific to you.
- Some questions will be completely unrelated to your skills, your experience or even the job you're applying for. Don't panic – the interviewer is simply trying to see how you react when you're out of your comfort zone.
- Turn up on time. Early is better.

Get ahead
Project Anarchy

J is for Job Descriptions

It's absolutely vital that you read job descriptions very carefully when applying.

Vicon's product manager Philip Elderfield (*pictured*) says: "Nobody wants to waste time applying for the wrong job. Rejection can be a blow to confidence, which can be avoided with careful choosing.

"Job descriptions are often quite brief, but they are generally the only information available to help you decide whether the match is close enough to invest further time in perusing the role.

"It's pretty rare that you'll read a job description and think 'that's exactly me'. More often than not, you'll find that the role broadly fits what you're looking for and your skill set but don't be put off if every point isn't crossed off. The best organisations invest in good people and that isn't always about ticking every box in a job description."

K is for Keywords

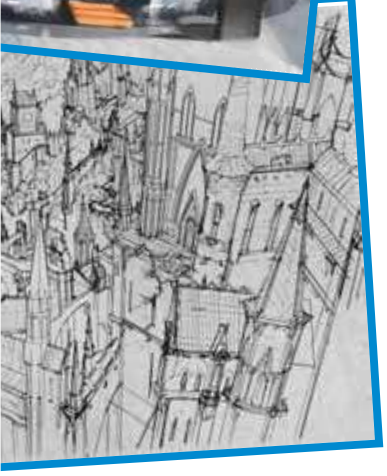
"It's very important you get your keywords right when posting a job listing.

"A candidate searching for a role will use a particular word or search term, so you need to make sure your vacancy contains this so it can be found within the job site search, and also on Google.

"Sometimes more than one keyword is needed in a job spec. For example, if a programmer is looking for a work within the mobile sector, their search could well be 'programmer mobile games', 'programmer iOS games', or 'engineer Android game'. In order to cover all of these searches you will need to have all of these keywords somewhere within your job spec. It's also good to give a rough idea of your location so people searching for 'programmer job in Midlands' can find you."

Nathan Adcock, OPM

Who's Viewed Your Profile
9
12
Who's Viewed Your Updates
James, start getting noticed.
Your LinkedIn Network
827
13,570
Add Connections



L is for LinkedIn

"More than 22,000 companies worldwide currently hire through LinkedIn. Often it will complement other recruitment channels, but more firms are seeing more of their hires come through LinkedIn. This is down to 'passive candidate recruiting', which means identifying and engaging talent, even if those professionals aren't actively looking for a job.

"An up-to-date profile including a professional headshot can be your best friend if you're looking for a new job. Make sure you add two or three previous positions and complete your profile summary describing your skills and experience. We've also given members the ability to add images, video and presentations on their profile, so other members can get a fuller picture of what you do."

Richard George, LinkedIn

M is for Management

Bored of being on the bottom or middle rung? Consider how you can progress your career all the way up to management.

Reflections' Lorna Evans (*pictured*) says: "Moving into management is all about communication and people skills. People who are good at this are in short supply, which is a real opportunity for those who have a passion to develop others and earn more money.

"If you are naturally a person who feels good about helping others shine and are okay to replace the word 'I' with 'we' then this is something you may want to consider. Find a mentor and understand what 'good' looks like. Talk to your HR Manager and seek training. If people like you and you have a good attitude, you really can start to build on these traits as a future career choice."

N is for Networking

"By attending major events, workshops or exhibitions, you show your interest in the industry as well as in the companies that are attending.

"Events are also a great place for networking. It is always good to know people from different companies and countries. You never know – there could be a job opportunity during lunch time or a presentation.

"It is also always a great opportunity when you are the one who holds a presentation or workshop. If you have the chance for this, you should take it.

"Furthermore, some companies like InnoGames have referral programs. This means you might get a job offer first hand from an employee out of your network who already works in this company."

Christoph Hillermann, InnoGames

O is for Opportunities

One way you can forge a long-term career in games is to keep an eye on where the key opportunities lie. It's not just about what developers need now, but what they need in five-to-ten years' time.

"Unity and Unreal Engine skills are in demand more now than ever due to the growth of mobile and social developers in the market," says Amiqus' head of games recruitment Stig Strand (*pictured*).

"Building a good working knowledge of these skills in your spare time will lead to securing more interviews and opportunities in 2014, especially if you work in technical design.

"HTML5 programming skills are also rare and increasingly in demand, and experienced console programmers and producers are always needed to join expanding teams now that the next generation of consoles has arrived."

P is for Portfolio

Few things can impress a potential employer like the best examples of your work, either from previous jobs or your own projects. But compiling an inaccessible portfolio can diminish the impact of your work. Here's our industry top tips to ensure your creations shine:

■ Only include your best work. If you have older work that doesn't quite show the best of your abilities, make it clear when it was first produced. Consider adding notes on what you would change now.

■ Try to send relevant examples. If the studio specialises in RPGs, send artwork that would suit this genre.

■ Put your newest and best examples towards the beginning of any demo reel – you need to impress them from the off.

■ Demonstrate your variety. If you're an animator, for example, don't just show characters walking and running – have them pick up a box, push heavy objects and so on.

■ Confusing layouts and unstructured information will make it harder and less likely for the recruiter to explore your full portfolio. Remember, you only have 20 to 30 seconds to grab the viewer's attention. If they are put off within that time, they'll just move on to the next candidate.

■ Show how you have worked to a brief in the past, or iterated on your designs for things like costumes and vehicles.

■ Take your time. Make sure everything works and is in top condition before submitting it.

■ Consider investing time in an online portfolio, even if it's a free website. This gives you a link you can send to people interested in your work.

■ Be as creative with the portfolio as you are with the work. Think about how you can make it stand out from the competition.

Q is for QA

QA testing has proven to be a great gateway into other aspects of development. The skills and processes you learn in this area prepare you for most other disciplines.

Testronic Labs' recruitment resourcer Pedro Barahona (*pictured*) says: "QA gives you great insight into the final steps of production, and how developers work. Localisation QA in particular tends to come late in development, often during the infamous 'crunch' period. It is hard, precision work, under great pressure and tight deadlines.

"As this is a job with very few academic and technical requirements, it is a great way to add quality content to your CV and because of the flexible nature of the work, it is often something you can do whilst studying or doing other work. You will also gain friends and contacts in the industry."

R is for Relocation

Working overseas can be an attractive proposition, but you must consider all aspects of relocating your life.

"Some companies help new employees from foreign countries with their relocation," says InnoGames' lead recruiter Christoph Hillermann. "This includes help with visas and finding a new apartment.

"What information and documents are needed varies. It is easier when you move inside the EU than from the US to Europe, for example.

"Another issue is language. We are a German company but our company language is English, because we have colleagues from 22 nations. We also offer language courses in German or business English, if needed. It is also important to learn about the different tax system in the country you will work in to avoid any surprises on your payslip."

S is for Silicon Roundabout

"Based in the heart of Tech City, Silicon Roundabout is a vibrant area of East London where a cluster of tech, gaming and creative companies are ever-growing.

"The area offers a wealth of opportunity for top talent in London and is a great mix of business and pleasure – often throwing some great parties and events. For example, Silicon Drinkabout is an event with after work drinks for start-ups every Friday. It's open to tech and creative firms of all sizes as a place to meet like-minded people, swap ideas and help grow and prosper.

"Mind Candy, creator of Moshi Monsters, moved to the area in 2011 after seeing it gain a lot of momentum. The Silicon Roundabout area has helped us grow by attracting talent from all around the world."

Amanda Cowie, Mind Candy

T is for Twitter

"Twitter provides the opportunity to follow relevant and important individuals within the games industry.

"You can use Twitter as a platform to demonstrate your knowledge, opinions and enthusiasm for the industry, as well as other aspects of the market. You can also use it to demonstrate your skills with links to your work. Over time you can really make a name for yourself. That wasn't possible to do before.

"So it's a great platform to provide links to your personal blog, portfolio, your company page or a piece you have written. If hiring managers regularly see impressive work or contributions to the industry, you increase your attractiveness to studios."

Peter Leonard, Amiqus

U is for University

"A university with an established and recognised gaming course can give you the skills and knowledge you require to enter the industry.

"Good courses give you experience in group work and time management, practical skills, and a portfolio of work. It will also encourage extracurricular events like game jams and will give you contact time with studios, which will allow you to see what development is like and show the studios what you can do.

"It is vitally important that you decide what you want to do in the industry so that you can study the right course. Many large studios prefer a postgraduate level of study, so you may want to consider courses that offer an MEng, or study an MSc course after your undergraduate course."

Darren McKie, University of Hull

V is for Visas

If your career takes you to a new job overseas, there is still the barrier of visa applications to overcome.

Hamburg-based Goodgame Studios hopes to hire 600 employees from around the world this year, and offers the following advice.

"Non-EU nationals who apply for jobs should request a so-called 'Blue Card', an approved EU-wide work permit, ahead of time," says head of HR Hendrik Mainka (*pictured*). "It can take between two to three months until a Blue Card is issued. Without this, applicants are not able to legally stay and work in the European Union.

"We also provide an 'onboarding' service for international employees. The support ranges from finding accommodation to opening a bank account and filling out government forms."

W is for We Are Racing

"We Are Racing is Codemasters' call for talent who share our passion to join us. We're preparing for the road ahead and this campaign celebrates the passion that runs throughout our studios for creating best-in-class racing experiences.

"We're hiring across programming, game design and art disciplines for projects on our core series, such as F1, GRID and DiRT, alongside franchise extensions and new IP for all the major console platforms, PC and mobile.

"With our Warwickshire campus in the fields and our city-centre studio in Birmingham, our working environments suit any preference and offers flexitime to help maintain a positive work/life balance."

Rich Eddy, Codemasters

X is for Xyrality

Xyrality is a prime example of the burgeoning development community in Hamburg – a city aspiring developers should consider when searching for jobs.

"Hamburg is a great city for making games," says HR manager Hanna Bernicke (*pictured*). "There are 140 developers and publishers with together over 3,000 employees in this city. You can also meet many of the industry's important and interesting people at the numerous networking events that take place in Hamburg.

"With our current size of 75 employees, we're still small enough to enable everybody to develop their own ideas and big enough to have the necessary resources to realise them. We're always looking for motivated talents that share our passion for great games."

Y is for You

"One of the best ways to sell yourself is evidence-based through portfolios, documentation, working demos or code examples. Prepare a clear picture of the core skills and attributes you bring to a company – not only what applies to the job, but additional skills too.

"Recall your achievements at previous employers that had an impact on content, process or any other factor that was down to your contributions.

"Always be yourself though; you will feel more comfortable in the interview and come across more confidently. Your potential employer will respect your honest approach. Should you secure the role, you will be more likely to stay longer term if the studio provides the right fit for you as well as the right position."

Peter Leonard, Amiqus

Z is for ZeniMax

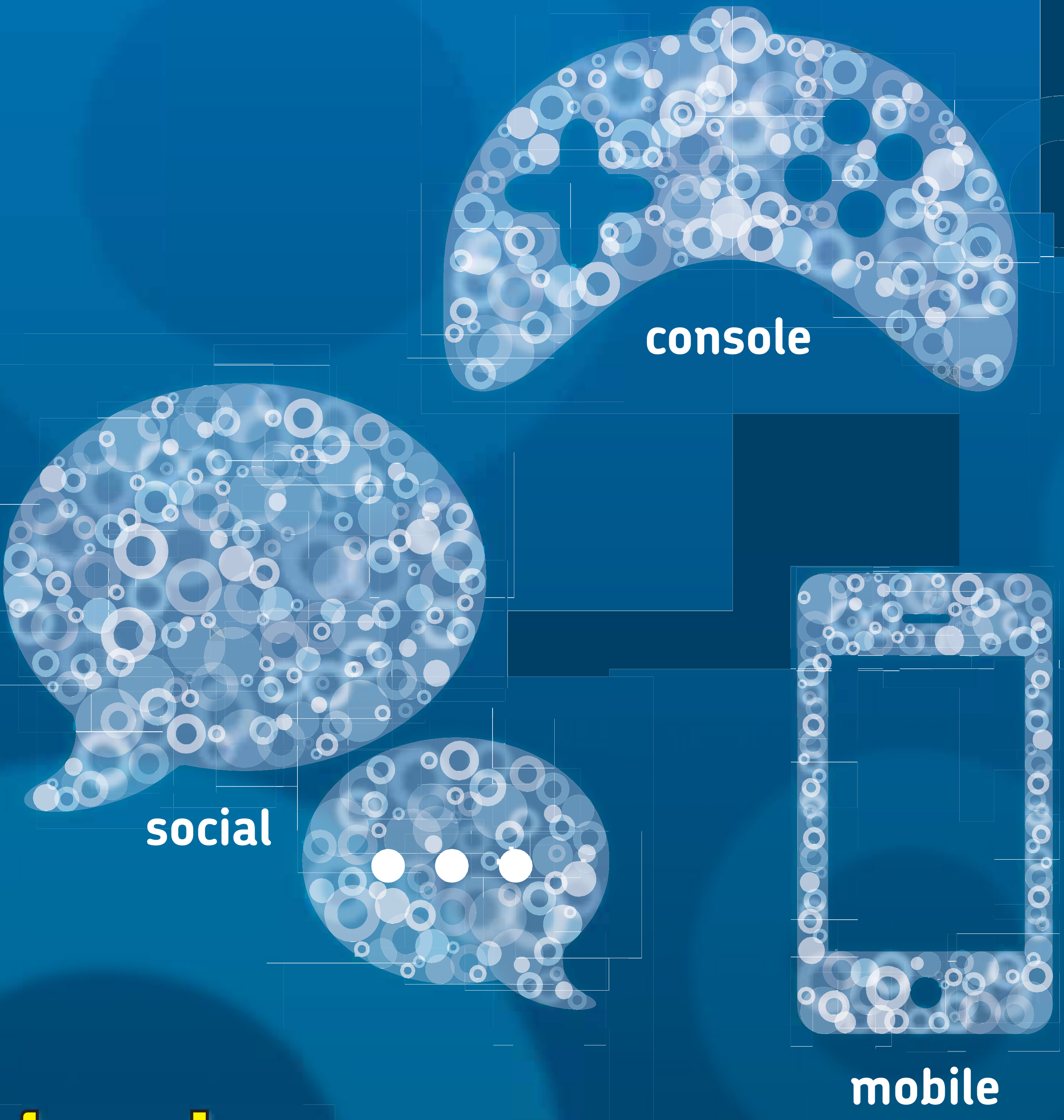
Bethesda parent ZeniMax is currently growing many of its studios, including the Austin branch of *Dishonored* developer Arkane and BattleCry Studios.

BattleCry president Rich Vogel says he is looking for designers, artists, animators, programmers, platform engineers, QA testers and web developers for its first title, an unannounced free-to-play project.

"We are looking for people that are driven, smart, easy going and who like working in a team environment," he says.

Arkane Austin, meanwhile, is working on a next-gen game. President Raphael Colantonio adds: "We are currently looking to add roughly 30 people across every department, particularly art, animation, programming, and level design."

Let us help you make the right call on your career


console
social
mobile

develop
INDUSTRY EXCELLENCE AWARDS
WINNER '13

To take your career to the next level
visit **amiqus.com** or call **01925 839700**

amiqus

Breaking freelance

Whether you're considering going freelance for the first time, or are employed at a studio that tackles contracting work, Develop has expert advice you can't afford to miss. Those in the know tell **Will Freeman** how it's done

FOR ALMOST AS long as there have been video games, there has been talk of the day they would collide with films.

What many failed to predict, however, was that the collision would begin with the games industry increasingly aping studio models established in Hollywood.

Today, more development outfits than ever before have embraced working with increasing numbers of contractors and freelancers, scaling team sizes up and down just as their contemporaries at film studios globally have done for decades.

> ***"The number of video games studios adopting the contracting model today is higher than ever."***

It's not an entirely new trend in the games industry, but the number of companies adopting the model today is higher than ever.

As a result, opportunities abound for freelancers and studios that take on contracting work. But learning the fine art of working for clients takes some doing and there are many pitfalls, from securing new work to dealing with erratic clients.

For that very reason, *Develop* has spoken to dozens of experienced freelancers, and here they share with you the lessons they've learned, to help you better your chances in the competitive world of freelance and contracting. ■

SECTION 1 NEW TO FREELANCE OR CONTRACTING?

For those about to embark on a freelance career or take on contract work for the first time, there is much to learn about how you can set up shop. Fortunately, we've got the most important first lessons right here

"Companies aren't looking to hire freelancers who will learn on the job – they are paying you to arrive with the skills and knowledge they need. If you're new to the industry or to your particular field, make sure you get experience by either working in a professional team or on individual projects before you try to do serious freelance work."

Cat Burton,
Unity Developer

"You don't get to be an artist until you've been a salesperson. So, if you don't honestly enjoy pitching, you'll find freelancing very uncomfortable. It's sensible to study the process of a sale and apply it in your conversations with potential clients. It's easy to meander and forget to close the deal.

Rob Yescombe,
Writer and Creative Director

"If you're starting out without a lot of experience, look for bedroom coders or microstudios to work for in order to gain experience. It's not where the money is, but if these studios are successful there's a good chance you'll be able to keep working with them. If they're not, these people will most likely end up working in other studios and contacts count for a lot when you're out chasing work later in your career."

Nick Scurfield,
Illustrator

"Find a studio you would love to work for, and really research the artwork/artists that they use. Practice until you are producing work as good as – or even better – than they have already. Then form a small showreel or mini portfolio with the work in it and send it to the person highest up the food chain in the studio as possible. This should really impress as they may think 'why the heck haven't we hired this person yet?'"

Woody Stables,
Illustrator and Artist

Hello!
www.specialmove.com
specialmove
RECRUITMENT
sm

Secret Sauce.

Your special ingredient for :-

- Community Building & PR
- Conferences, Exhibitions, Product Launches
- Business Development

Past clients include Epic Games, SCEE, Pitbull Studio, Brain In A Jar, University of Abertay, Dundee and many more.....

Please contact carri@secret-sauce.co.uk for more information.

@secretsauceltd

SECTION 2
FINDING WORK

Once you've set up your business, you need to find work. There are opportunities out there, but with so much competition, a few tricks of the trade will help you go far

"Don't rely on recruiters or agencies. Writers, in particular, need to find work – as the CEO of one games development studio said to me, 'You only eat what you kill.'"

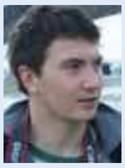
David Varela, Games Writer

"People can find you at the touch of a button and read about you, what you've been saying and what you've been doing. You need to remember this when looking for work. It's not as simple as putting demos online and waiting for the call. You have to be prepared to put in the legwork and get your face out there, both physically and digitally."

Sam Hughes, Sound Designer, The Sound Architect

"Becoming known as an expert in your field is better than all the advertising in the world. Blog, speak, tweet – getting your name out there and attached to high-quality content is a brilliant way of setting yourself apart from the competition and making sure people come to you with their problems."

Luke Dicken, Artificial Intelligence Specialist



"Build up a network. I have talked about this at length with other freelancers and the rule seems to be that around 90 per cent of the work we land comes from people we have worked with previously or have struck up friendships with online. When someone needs work doing, their natural response is to ask for recommendations from the friends and colleagues."

Jake Gumbleton, Concept Artist and Illustrator

"Create an interesting portfolio that shows off your skills but also how you are as a person. A game company views many portfolios a day, so ask yourself what distinguishes you from everybody else."

Johan Olsson, Sound Designer, Extreme Audio Recording

> ***"Your reel or portfolio defines you so make it bloody good. Cut out the crap and tailor it to your strengths, make it honest – as you should be."***
>
> Steven Huckle,
> Artist and Developer,
> Shark Infested Custard

"You will be judged by the standard of your work and your ability to deliver on time and within budget. Do a great job and your name will spread by word of mouth. However, if you are still looking for your first contract then you must make sure you have an impressive, commercial quality demo."

Nick Thompson, Founder, TuTecNix

"Find your speciality and work hard to be not just very good at it, but the best you can be. Freelancers have a lot of competition from fellow freelancers and the best jobs will attract a lot of attention so you have to be very good at what you do in order to secure the best jobs."

Cat Burton, Freelance Unity Developer

SECTION 3
WORKING PRACTICE

If you're to keep working, you need to deliver the learned art of professional service. Our experts offer advice to improve the way you satisfy clients

"Don't be obtrusive or uncommunicative. You need to be easy to work with, and someone that the client can rely on to get things done, with the minimum amount of fuss. That means making sure you're doing the right work, and doing it well; it also means that you have to be responsive to the client's changing needs; and they will change."

Chris Chapman, Software Specialist, Black Company Studios

"Be that freelancer who never delivers late or substandard work. Be flexible and responsive, and answer directly to the brief. Always be professional, and be prepared to accept criticism. Let your creativity show in your work, and your professionalism showcase your business skills."

Jonathan Baker, Animator, Skellybobbly

"Never close your mind to new ideas and ways of working – no matter how experienced you are, you'll never stop learning. Also, make sure that you take a break from work. It's so easy these days to be constantly working, since we carry our emails and so on with us at all time. Try and switch off from time to time – otherwise you'll burn out."

Gavin Harrison, Musician and Sound Designer, Gavin Harrison Sounds

"Freelancers are expensive for a reason. When studios hire us they're paying for expertise, patience and viable solutions. When you work in-house, you can have a slow day, or moan about your conditions, or be a bit late with your delivery. We don't do that.

"A freelancer must be rigid in their excellence, or they'll simply fall off the map."

Rob Yescombe, Writer and Creative Director

"Do not work for free, it lowers the standard for the entire industry and your services are always worth something. Always ask for a contract and read it carefully."

Johan Olsson, Sound Designer, Extreme Audio Recording

"Keep in good favour and never burn bridges. With studios collapsing and starting up in a seemingly endless cycle, the games industry is a hugely incestuous entity and with people passing through dozens of studios in their career. Word can spread rapidly. If you let someone down they won't keep it to themselves, so follow the brief to the letter and go above and beyond the call of duty whenever possible.

Nick Scurfield, Illustrator

Don't be indifferent to the business or perfunctory in your work; nobody likes a freeloading mercenary.

Kevin Corti, Principle, SpiderShed Media

> ***"Never accept work beyond capacity, and [always] update work progress regularly."***
>
> Sankalp Chandra,
> 3D Artist

SECTION 4

PAY, RATES AND CONTRACTS

Passion fuels many games careers but there's still food to put on the table, which means understanding contracts, paying tax and negotiating rates. Here's how it's done.

"Don't make a quote on a case-by-case basis. Use a fixed price schedule – a daily, weekly or monthly rate. Clients will not take you seriously if they get the feeling you are just making it up to get as much money from them as possible."

Pascal Luban,
Game Designer and
Creative Director

"Expenses should be monitored very carefully. Keep track of all your expenses, keep receipts, and try to keep a journal of your day-to-day adventures. The biggest mistake you can make is to lose track of where, when and who. It's a lot easier putting an invoice together if you have a record of where you were, how long you were there for and how you got there. Write it all down."

Sion Lenton, Team Lead,
Cugat Productions

"Make sure you get paid. Companies sometimes treat freelancers as the last people to get paid when cash flow is tight, but remember you are running a business; being easy to work with isn't the same as being a push-over. Never let a client build up a debt to you without some leverage to ensure that you get paid"

Chris Chapman,
Software Specialist,
Black Company Studios

"Especially within an industry based on fun, it can be tempting to just get stuck in, but make sure you sign off your contract before doing any work – this is your safety net if anything goes wrong.

"Signing a contract means you won't have any worries over what your clients might do with the work you've already sent, or having wasted valuable time if there turns out to be difficulties with the contract."

Hugh Holton,
Music Composer

"As a freelancer, you are a small company, so don't forget about important the tax implications that brings.

"There are free business start-up courses which give info on tax but as a minimum make sure you put 'tax money' into a separate savings account each time you get paid and never touch it until the Inland Revenue want it.

"It's also important to know that half way through your second year – and subsequent years – you'll have to make tax payment on accounts (an advance on next year's tax bill). Make sure you've saved up enough or it can be quite a shock."

James Trubridge,
Gameplay Programmer

SECTION 5

CLIENT MANAGEMENT

For the lucky, clients are typically a pleasure to work for. But every now and then, a freelancer is faced with a tricky customer. Either way, careful communication is vital

"Don't tell your client what he wants to hear. State your honest opinion. Most clients are looking for just that. Of course, once you have expressed your opinion, follow his decisions, even if you disagree."

Pascal Luban, Game Designer
and Creative Director

"You must never act unprofessionally. If you find yourself annoyed by a situation, do not react negatively. Go and grab a cup of tea and distance yourself from the situation."

Jake Gumbleton,
Concept Artist and Illustrator

"[Be careful about] not asking enough questions and presuming. If you're unsure about anything at all, ask, confirm and double check."

Steven Huckle, Artist and
Developer, Shark Infested Custard

"Don't promise more than you are capable of in order to secure a contract and don't overestimate your progress to keep the client happy. Honesty is always the best policy."

Nick Thompson,
Founder, TuTecNix

"Never let anyone down: never be late, and always finish a job. If you can't for whatever reason, give them plenty of notice, and recommend someone you know that will be able to complete the job. If you screw up, don't charge them – it's all about trust, and your good name and reputation is invaluable."

Shaun McClure, Artist

> ***"Don't underwhelm. There's nothing worse than somebody who doesn't seem to care or just wants the money. Show that you're genuinely passionate about the work you do."***
>
> Antony Bowler,
> Co-founder,
> Razor Sharp Studios

Mind Candy®

WE'RE HIRING

Mind Candy is on the lookout for ambitious and creative people to join our team.
Potential Mind Candies need something extra.
A quirky edge, a positive attitude and a driving passion to bring something unique to our party.
It's hard to define but you'll know if you've got it. And so will we.
Think you can measure up? Let's talk!

Want to join the fun?

Check out

mindcandy.com/jobs

© 2013 Mind Candy Ltd. Moshi Monsters is a trademark of Mind Candy Ltd. All rights reserved.

You can't BEAT our A.I.

That's our AARDVARK INTELLIGENCE

Since 1989, Aardvark Swift have dedicated our every effort to the Video Games industry.
Evolving with each and every generation of consoles, mobiles and game genres.
Becoming a market leading, specialist recruitment consultancy for the Video Game and Mobile Entertainment market across the UK, Europe and the world.
From art and programming to sales and marketing, permanent positions to contracting, we have all the recruitment intelligence you need to find the right talent.

WELCOME to our UNIVERSE

aswift.com

Follow Aardvark Swift Recruitment on Facebook
or you can call us on 01709 876 877

SECTION 6
NETWORKING

Everybody knows the clichés about freelancers never leaving the house, but the reality is that you need to get out there to secure the best jobs

"Go to the networking events. Go to events that interest you within the field that you love. Join forums. Use social media, Twitter is a fantastic way to reach other people in the industry and engage with them. Research others who are in your position or even better, those who are where you want to be."

Sam Hughes, Sound Designer,
The Sound Architect

"Go to as many events as possible – I can't stress this enough. Whilst we can do so much online these days, nothing compares to actually meeting people, shaking their hand and having a conversation over a beer/coffee/tea. Not only will you establish better working relationships with people in the industry, you'll most likely also build up strong friendships.

Gavin Harrison,
Musician and Sound Designer,
Gavin Harrison Sounds

"Networking may make you feel like you're in sales, but it's really important. Pick and choose a conference or two. Make sure you say hello to absolutely everyone: people on the booths, anyone you sit next, and chuck in a few you randomly make eye contact with. It's easy, it's fun and it's amazing who you meet."

Antony Bowler,
Co-founder, Razor Sharp Studios

> ***"Get out there. There are many freelancers working in the games business but it's all to easy to ignore that and go 'lone wolf'. Find opportunities to meet your peers at networking events, trade shows and conferences. Talk to them about the market and their experiences – you'll find you have just as much to contribute."***
>
> Sion Lenton, Team Lead,
> Cugat Productions

SECTION 7
SPECIALISING

Do you tailor your offering or offer a broad range of services? It's a dilemma as old as freelancing itself, but ultimately, each has its pros and cons

"Don't claim to be a generalist. Way too many people freelance in 'Unity 3D' or something – that's great, but what makes you special from the hundreds of other people who also specialise in that? Find a niche and become known for it."

Luke Dicken,
Artificial Intelligence Specialist

"Be flexible. Being a character artist is great, but you're limiting your audience. A character artist who can also create level of detail models, rig and also animate, for example, is more valuable to the client as they will get more for their money. In the long run, having those extra skills will also open up more work options should character work go through a dry spell."

Antony Ward,
Artist, Illustrator and Animator

THE STUDIO PERSPECTIVE

Fireproof Games explains why hiring contractors works, and how studios embracing freelance can foster the best results for their games

Barry Meade, above, says freelancers give games a quality that might not be available in-house

INCREASING NUMBERS OF games developers are using freelance talent, but what are the perks?

"The obvious one is not having to take on permanent staff, but it's also to hire experts: people who are really good at what they do," says Barry Meade, director at Fireproof Games. "Hiring a freelancer can add a quality and class to your work that would be hard to find even if you could afford to take on a permanent hire. So freelance has advantages in adaptability as well as ability."

But picking the right talent can be as tricky for a studio as finding work for a freelancer. Fortunately, Meade has some insights to share on what to prioritise when looking to find the most suitable contracted talent.

"We wanted people who could 'get' us, and our work: someone we didn't have to over-explain things to. For instance on *The Room* we hired a fab composer and we had only one conversation with him, gave him music to be inspired by, and that was pretty much it. He came back with the perfect piece, bang on the money. He was experienced enough that we could bypass talking about technical requirements and get straight to the content."

In the end, the art of picking a freelancer isn't so different from recruiting new staff. It might be remarkably tough, but when you find somebody that clicks with your studio culture, they could be just the person you need.

World Class Games and Technology Jobs in North East England

What will you do...

#IDidItHere | **W:** eutechnyx.com/IDidItHere

EUTECHNYX ZL ZeroLight

opm recruitment
programming
dev management
test and translate
commercial
creative

ukie

FINALIST develop
OPM – AWARD NOMINEES
EVERY YEAR SINCE 2004

No Lag.

Helping you keep pace with change.

The games industry moves quickly, it's possible that candidates who were strong last year may not be quite as relevant to a project the next.

This is why finding out what a candidate can do, and what they'd struggle with, can make an enormous difference. Sometimes it can be the difference between the success and failure of a project.

Often just a handful of people are right for the most highly skilled roles. Finding this talent requires a human touch and a deep understanding of the past, present and future of the games industry. When it comes to our candidates, we drill down surprisingly deeply into someone's skill set. We only send people who can do the job – we've yet to meet anyone who does business quite like us.

Visit our website or give us a call for an informal chat about your recruitment needs.

T: +44(0)1206 21 44 21 | www.opmjobs.com

PLACING PROFESSIONAL PEOPLE IN PROFESSIONAL PLACES

From indie to in-house

Press Play co-founder Mikkel Thorsted tells **Craig Chapple** how three students went from forming their own indie outfit to becoming a first-party Microsoft studio within six years

Press Play's co-founders Ole Teglbjærg (above) and Rune Dittmer (bottom), the college friends that charmed a super-publisher

AN UNLIKELY DEVELOPMENT team for a Microsoft Studios acquisition, Press Play started out as a three-man indie outfit off the shores of Copenhagen in Denmark.

The studio was formed by computer science and communication students Ole Teglbjærg, Rune Dittmer and Mikkel Thorsted. Despite only just finishing school, Thorsted says the young developers took a "cocky, fresh-out-of-college approach" to take on the world of internet Flash games and develop better and more interesting titles than those that had already flooded the market.

Its debut game, however, was platformer *Max & the Magic Marker* for multiple systems such as the PSN, WiiWare, Nintendo DS, iOS and Windows Phone. But, notably, none of these were Xbox.

The game's innovative object drawing system, which is used to create physical objects in the game, was clearly part of what first attracted Microsoft to the studio. The developer's subsequent plans for a reimagining of the title and the bubbling pot of creativity fostered by the young team eventually convinced Microsoft to approach and acquire Press Play in 2012.

FIRST-PARTY MAGIC

But despite now rubbing shoulders with famous developers such as *Halo* developer 343 Industries, *Fable* studio Lionhead, *Forza Motorsport* creator Turn 10, *Kinect Sports Rivals* outfit Rare, and all the expert professionals these famous games studios house, co-founder Mikkel Thorsted says not much has changed at the company.

During its formative years, the studio did a mix of work-for-hire projects and web development services to ensure it brought in money, on top of making its own titles, such as the aforementioned *Max & the Magic Marker*.

"Most importantly we kept coming up with interesting concepts that we could find funding for," says Thorsted. "Furthermore, we chose to partner up with a wide array of publishers and bring *Max & the Magic Marker* to pretty much all platforms."

> ***"They wanted us to still feel like an indie studio, but without all the headaches of being indie."***
>
> Mikkel Thorsted, Press Play

Their plan to develop interesting concepts worked, earning the studio positive review scores and, eventually, that acquisition.

But as Thorsted says, the studio still retains the same culture and ambitions it started up with and has not changed after becoming a part of the big corporate machine.

"Microsoft and Press Play agreed on what we call a light touch acquisition, meaning they wanted us to stay Press Play and let us run the studio in the same way as we already had been doing," he explains. "Basically they wanted us to still feel like an indie studio but without all the headaches of being indie.

"That means we would not have to do work-for-hire, constantly seek funding or pitch publishers. It, of course, also meant an economically stable situation. What we gave away was ownership of our company, and our focus is more on Microsoft platforms now."

He goes on to say that being a first-party studio has not meant a loss of its treasured indie development culture, on both a professional and social level. He adds the team is still highly ambitious with all of its projects, and that this passion is coupled with a work philosophy that demands the team has fun while it's at it.

PLACING A MARKER

Its first project, in fact, is for the Xbox One, as well as Xbox 360. Called *Max: The Curse of the Brotherhood*, the artistically-styled, Unity-developed 2.5D side-scrolling platformer is a reimagining of the original *Max*.

Being part of Microsoft and not having to worry as much about where its next cheque might come from, Thorsted says Press Play was able to scale up the team to make the jump from 2D to 3D, and were able to slightly change

Thanks to Microsoft's backing, Mikkel Thorsted (main left) and his Denmark studio have been able to reimagine their debut title, Max, for Xbox One in 3D, and refine the gameplay experience

the title's core drawing mechanic to ensure a tighter gameplay experience.

Rather than offering the complete unbridled freedom of the original magic marker, which was previously a free-drawing mechanism in the first title, the new maker is now limited to dedicated inkwells placed strategically around each level.

“This has ensured that we have been able to create and control the puzzles to a much higher degree,” he says. “So basically what initially may look like a limitation of the drawing mechanic has actually allowed us to expand the gameplay substantially. All this has meant that our approach to designing the game has been based on our experiences from developing *Max & the Magic Marker* without being constrained by having to connect the two titles directly.”

Making an Xbox One launch window title hasn't been completely plain sailing for the studio, admits Thorsted, who recognises that working on in-development hardware likely to change regularly as Microsoft refined parts of the architecture resulted in some turbulence during the game's development.

But aside from those inevitable challenges, he assures that working on Microsoft's console has been a good experience. The high specs and PC-like architecture, a decision which has garnered superlatives from developers toward Microsoft and Sony's PS4 alike, has “minimised a lot of the hassles we normally run into working on consoles”.

> ***“It is my honest impression that Microsoft is doing all it can to create a more open platform.”***
>
> Mikkel Thorsted, Press Play

But what about Microsoft's support for small indies in general? And not just the large independent firms or those like Press Play.

The firm has oft been criticised for its treatment of developers on Xbox Live Arcade toward the end of the Xbox 360's lifespan, despite a bright start for the service. Its recent ID@Xbox program for indies on Xbox One has since been treated with caution and quiet optimism as indies await to see how it will develop, and just how soon those retail console units can be used as a dev kit.

“It is a hard question to answer from our position, but I think Microsoft is doing a lot to support indies, especially with the ID initiative,” he says. “It is my honest impression that Microsoft is doing all it can to create a more open platform while preserving the quality of its services.”

DRAWING ON EXPERIENCE

Despite being part of the Microsoft monolith, the studio hasn't yet worked with its partners on any direct game collaboration. Thorsted says, however, that the team has still been able to ask questions of its fellow devs to overcome any hurdles it may face.

Perhaps lending to one of the reasons Microsoft acquired the studio, Thorsted expects the firm's other first-party studios to come to Press Play for its expertise on Unity.

For its next game, currently being kept under wraps, Press Play is set to take advantage of tech developed at another new Microsoft studio, Lift London. Given all this potential support, he says moving from indie to first-party has been a positive step for the team.

“Having a big family is, as far as I see it, always a good thing,” says Thorsted, who believes being a first-party studio will allow them to achieve all of their ambitions.

“It means we can make the games we love making and it means our focus will always be on making ambitious and unique games. So expect a lot more titles from Press Play in the future. I hope we will keep surprising everyone with what we come up with.” ■

Automagic™ 3D Optimization

Simplygon is the leading solution for automatic optimization of 3D-game content and Level of Detail. By replacing tedious and time-consuming manual work, Simplygon offers the benefits of LODs but without the drawbacks of increased production time and development cost.

www.simplygon.com

SIMPLYGON™

Simplygon and Simplygon logo are all trademarks or registered trademarks of Donya Labs AB. All rights reserved. Copyright © 2013 Donya Labs AB

Marmalade™

Marmalade **SDK**

All the benefits of C++, cross-platform

- Take the performance, openness, flexibility and low-level access of C++ to the platforms that matter
- Use all the power of C++ to target more platforms and more devices with a single codebase

Stay in control when you take your code cross-platform

Start your free trial at:
madewithmarmalade.com

TIZEN
BlackBerry
LG
Windows Phone
Roku
Windows 8
nook

© 2014 Marmalade Technologies Ltd

#DEVELOPJOBS

Your monthly guide to the best career opportunities in games development worldwide

Switching lanes

Alex Ward sets out for a new frontier, p42

David Percival on life at Codemasters p45

Behind the scenes at Ninja Theory and Housemarque p47

MOVERS AND SHAKERS

This month: Criterion, ARM, Marmalade, InnoGames and Climax

Sponsored by
Aardvark Swift
Video Games Recruitment

WARD AND SPERRY LEAVE CRITERION

CRITERION ■ Long-time Criterion staff **ALEX WARD** and **FIONA SPERRY** have left the studio to form their own independent outfit.

Ward was vice president and creative director, while Sperry served as studio director at the UK developer, which is owned by Electronic Arts.

The remaining Criterion team are said to still be working on a new title for Xbox One and PS4.

"Alex Ward and Fiona Sperry have decided to leave EA," a spokesperson told Polygon. "We appreciate their many contributions through the years and wish them well in their future endeavours.

"The incredibly creative and talented team at Criterion are hard at work on a new project for next-gen consoles as new IP continues to be a major priority across EA. Matt Webster is leading development of the new game and the Criterion studio moving forward."

In addition to his new venture, Ward has also begun writing bi-monthly columns for *Develop* magazine, starting with this issue (*see p8*).

Alex Ward (above) and Fiona Sperry (above right) are starting afresh with a new game studio

ARM ■ Hardware and tools firm ARM has appointed **CHRIS DORAN** as a director of lighting firm Geomerics, which it acquired in December.

Doran will be continuing to set the strategic direction of the company, which he founded in 2005, focusing on developing a unified offering across mobile, console and PC.

"As a long-time resident of Cambridge it is great to now be working for ARM," Doran told *Develop*. "They are one of the country's great success stories of the last decade, and their increased focus on games and graphics is good news for the industry in the UK and beyond."

He added that ARM is committed to Geomerics continuing its current activities, and that "it was very important to them that the full team came across".

MARMALADE GAME STUDIO ■ Marmalade's in-house studio has appointed several experienced creative and production staff to work on upcoming projects, including work with Hasbro.

RACHEL THRUM *(pictured)* joins as a senior producer. She has over 15 years' experience leading, designing and delivering creative products in games, education, TV, installations and theatre.

Other hires include former Eutechnyx employee **TERRY LEE**, who joins as producer, and **DANIEL LEAVER** as a senior game designer.

SIMON PICARD and **MIKE ROSSER** join the studio's art and design departments respectively, while **ANTHONY SAVVA** will be aiding the programming team.

INNOGAMES ■ Online developer InnoGames has named **ANNE GROVU** its new head of HR.

Grovu will be helping the maker of *Tribal Wars and Forge of Empires* to hire an additional 100 staff this year.

"I am very excited about joining InnoGames and look forward to the young and international atmosphere," said Grovu. "InnoGames is one of the most attractive employers in Germany and is looking for 100 highly qualified new colleagues. I look forward to being part of this healthy growth process and actively shaping the HR department."

Grovu was previously head of HR at Airbus Cimpa and was responsible for the international training management.

The Hamburg-based company currently employs about 300 staff.

CLIMAX ■ Portsmouth-based developer Climax has two new starters for its publishing and programming teams.

SAMANTHA LEUNG *(left)* joins the publisher relations team. She will be working alongside the CEO Simon Gardner in developing and seeking out new relationships and business opportunities with publishers for Climax.

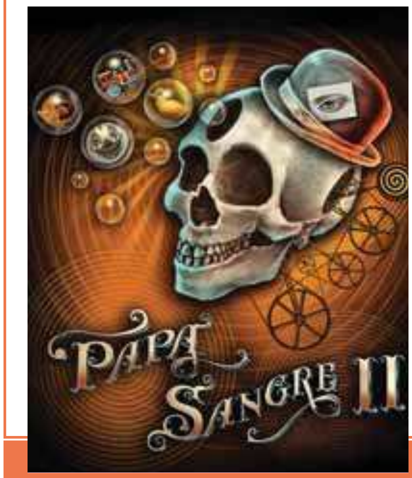
And **ALIONA KOTUSEVA** *(right)* joins Climax's programming team.

Hailing from Minsk, Belarus, she worked for a number of years at Steel Monkeys in her home country.

"I am incredibly excited to be working in the UK for such a prestigious games development studio," said Kotuseva.

Aardvark Swift
www.aswift.com
The UNIVERSE of VIDEO GAMES RECRUITMENT according to AARDVARK SWIFT
We'd love to talk to you about your next career move
hello@aswift.com
01709 834777

SIX-SECOND STUDIO SPOTLIGHT



■ London-based **Somethin' Else** is part of a larger content design agency, making a variety of media content for broadcasters and brands.

■ It specialises in audio and in the past few years it has developed a line of cult classic audio-only games, such as *The Nightjar* and *Papa Sangre*. "Recently, we decided to focus on this area and begin making audio titles back-to-back," says head of products, Nicky Birch.

■ Somethin' Else has 70 staff with ten working on games, among other things; and its aim is to make "innovative audio experiences and games with purpose".

■ All of its staff are multi-skilled and work across mediums, so its sound designers also film its game trailers and its drama producers feed into its binaural audio games.

■ It makes games for iOS, Android and the web.

■ Its next game is an audio shooter. Long-term, the studio aims to expand the business and pursue partnerships for its binaural platform, the PapaEngine.

Nicky Birch, Somethin' Else

www.somethinelse.com

RECRUITER HOT SEAT

Amanda Cowie invites you to join the Moshi Monsters' family, which is looking to expand even further in 2014

BIO
Name: Amanda Cowie
Title: Senior Talent Specialist
Developer: Mind Candy
www.mindcandy.com

> **Everyone in Mind Candy has the chance to pitch their new ideas to management – there are no barriers here.**
> Amanda Cowie, Mind Candy

What differentiates Mind Candy from other developers?
I truly believe that we are unique in so many ways. Firstly, we're very much an entertainment business. *Moshi Monsters* appears in so many different guises from the web game to console titles, mobile apps to multiple physical products, as well as books, the magazine, music and our recently released film and animated series.

Most of this is done in-house so we have many different areas that people can work in and learn from. Secondly, in addition to *Moshi*, we are working on multiple new products in different genres, demographics and platforms, which is hugely exciting for us.

Lastly, our culture and working environment is really special. We are true to our company values: respectful, entrepreneurial, passionate, playful, innovative and commercial. We have a very collaborative, information-sharing and fun environment, where people feel they can really input and add value to our business.

How many staff are you currently looking to take on?
We currently have around 30 roles open here at Mind Candy as we are growing at such a rapid rate. We're looking for a broad range of skills across tech, creative, product and project management, PR, marketing and licensing. Although each position requires a different skill set there are some core traits that we look for, which include a passion for the industry, a natural curiosity and desire to learn. Also, a willingness to take on anything, put forward ideas and the ability to be agile in an ever-changing environment.

What perks or privileges are available to staff at the studio?
There is a huge wealth of opportunities here at Mind Candy. We absolutely don't pigeonhole anyone, so people with talent and a passion for other areas of the business are encouraged to explore those areas further.

With multiple projects going on, employees have the opportunity to work on a wide variety of products. Everyone in the company also has the chance to pitch their new product ideas to the senior management team and wider company at our annual conference/festival, Candy Stock, in addition to working with all levels of the company on a daily basis – there are no barriers here.

We also hold game jams, hackathons and attend global conferences where we actively encourage teams or individuals to give talks. Employees can also 'give back' by volunteering with local children through our charitable foundation, which also donates money and resources to children's charities all over the world. Perks are plentiful, with everyone in the company having the opportunity to be a shareholder, hoards of free food every day, many social events, such as 'Beer o'clock Friday', sports teams and a life drawing class to name a few.

What should aspiring devs do with their CV to get to an interview?
This is such a critical point in the process for any applicant. We like to see passion coming through, something that stands out from the crowd. A developer that spends time doing a cover letter or even a video that shows us that they have researched Mind Candy, the role and working environment is always very interesting.

Our culture is incredibly important to us, so it's always good when we see a bit of personality coming through, which can be difficult to get across solely with a CV. It's always good to pick out some career highlights, interesting hobbies and also links to blogs, Twitter, portfolios or anything that gives us a bit more insight into the individual.

Who is the best interviewee you have ever had?
The best interviewees are people who walk into our office and are delighted by it. People who are passionate about Mind Candy, passionate about their trade and passionate about the amazing opportunities that are available to them here. Those people who are naturally curious and, of course, exceptionally talented.

And who was the worst?
The worst interviewees are those who turn up totally ill-prepared. My heart sinks when people haven't played *Moshi Monsters* or don't know our incredibly interesting history as it shows a lack of interest. We don't hide our light under a bushel – there's a lot of information out there about us.

What advice would you give jobseekers for getting an interview?
Be prepared. Mind Candy and *Moshi Monsters* have been in the press a huge amount over the years giving you plenty to go on, as well as a game you can play. Research the interviewers and other notable people in the company. Ask questions. This is a two-way process, where both parties need to leave feeling well informed. Be yourself, quirks and all. Be enthusiastic, we love our brand and we want you to as well.

What is Mind Candy's international recruitment process like?
Mind Candy is always on the look out for international talent and has recently welcomed several international candidates on board, providing relocation and sponsorship. There will be opportunities going forward for candidates to be based both here in London and in the US, building our brands over there.

There is so much scope as the business continues to expand globally for people to work internationally.

GET THAT JOB

Development specialists offer advice on how you can bag that career leap

THIS MONTH: HEAD OF GAME DESIGN

XYRALITY'S HEAD OF game design Torben-Lennart Böge discusses his role in game design.

What is your job role?
I am head of game design at the games developer and publisher Xyrality, based in Hamburg. I create, discuss and develop ideas and features based on suggestions from the community as well as completely new thoughts. My job links the interdisciplinary departments in a games company.

How would someone become a head of game design?
To become a good game designer you have to work hard, but you also have to be smart and well versed in the mechanics of the respective game. It is also necessary to know the developing processes to find cheap but efficient solutions, because possible changes in games always depend on the available resources. Finally, you have to be able to understand the different needs and problems that different types of players have. For example in our game *Lords & Knights* we have very aggressive players ('killers') and we have more passive players ('achievers') and they both have very different needs.

What do you look for when recruiting a new game designer?
Practical experience in game design is always important of course. However, you also need a broad knowledge of all kinds of games – video games as well as board games, trading card games and so on.

Communication skills – written and verbal – are crucial. Game design is all about discussing problems with different departments who may have different views on the topic.

> ***"You have to work hard, but you also have to be smart and well versed in the mechanics of the respective game."***
> Torben-Lennart Böge, Xyrality

What opportunities are there for career progression?
There are big chances in game design to make your career. Creative director is the top of the list, where you are responsible for the creative part of an entire project. However, there is a broad spectrum of fields that you can work on as a game designer. Apart from the variety of companies and projects, there are tasks in level and system design, narrative design and more that need to be done.
www.xyrality.com

If you've got job advice to share, email **Aaron.Lee@intentmedia.co.uk**

NEW STUDIO ALERT!

STARTED BY A band of computer scientists in Cambridge, **Improbable** is taking a fresh look at the technology and approaches behind gaming.

Originally formed in 2012, the studio recently came out of stealth.

"We think games, especially online games, can aspire to more. And here at Improbable we've been putting together ideas from cutting-edge research, original work and industry thinking to build systems that, as well as enabling completely new kinds of games, have potential in other areas," CEO Herman Narula (*far left*) tells *Develop*. "The industry is changing and the technology behind games needs to change with it."

With that in mind, Improbable is developing both tools and tech that aims to "enable developers to give gamers new, far bigger and better online experiences than have been previously possible".

The studio already has a team of 25 team, from sectors such as academia, finance and games development, including former Crytek games general manager Nick Button-Brown, and it's looking to grow its team this year.

"We're firm believers in showing over telling," concludes Narula. "We can say that our technology will allow us to build games that throw away many of the conventional limitations of online experiences."

INFO:

IMPROBABLE

Founded: 2012
Location: London, UK
www.improbable.io

Employee HOT SEAT

In this new section all about studio staff, we hear from Codemasters' chief technical officer **David Percival**

What do you do at your studio?
I'm Codemasters' CTO and I oversee our central technology department and the development of the Ego game tech, our award-winning, in-house core engine and tool chain.

Typically, my team are the first to get their hands on the new, cool tech years before it gets out there. My background with Codemasters Birmingham means I'm also still involved in the development of the *F1* series, although much of the day-to-day tech management now falls to other capable souls.

There's simply nothing more rewarding than working with switched on people. The gifted creatives that are everywhere you look in a company like ours are an inexhaustible source of surprise. If you're the kind of person that likes to learn new things every day, games development is the place for you.

How did you get your current job?
In almost three decades working in the games industry, I've been lucky enough to experience a wide variety of disciplines and genres. Unusually for a technical lead, I actually started out as an artist in the mid 80s. From there I progressed to art manager in the late 90s, at which point I switched to technical management and coding things like physics, collision and animation. I've managed progressively larger and larger technical teams until May of last year, when I was kindly offered the role of Codemasters CTO.

What perks are available to those working at Codemasters?
We have flexitime and a subsidised canteen and minibus, but more importantly there are opportunities here to suit the way in which any candidate would like to work – small, projects on smart devices or our larger hero franchises like *Dirt*, *Grid* or *F1*.

What's your advice for jobseekers?
Be yourself. Masking who you are will ring false and probably damage your chances. Consider, the games industry is stuffed with creative types, being different is the norm.

Be honest. Any interviewer worth their salt will try to ascertain how you might behave in a team situation. Lone wolf roles are rare; most jobs require collaboration and co-operation. How and when the words 'I' and 'we' are used say a lot about your attitude to others. Finally, a willingness to admit you don't know something can be seen as a positive. Everyone continues to learn in this job.

> ***"Be yourself. Masking who you are will ring false and could damage your chances."***
> David Percival, Codemasters

And do you feel your work has an impact on the studio overall?
Managing technical people is not for the faint-hearted. Surrounded daily by razor-sharp, insightful people, I've learned it's advisable to choose your words carefully or, better yet, shut up and listen. After all, you employ all those smart people for a reason, right?

I firmly believe most, if not all, of the information one needs to improve products, process or the studio's environment is already being discussed somewhere, by someone.

The smart people at the coalface have fragments of insight that will outstrip anything even the most intuitive of managers could hope to form. A gifted manager will always make a difference where they work; one who also listens and harvests the gifts of others will achieve much more.

Name: David Percival
Title: CTO

Developer: Codemasters
www.codemasters.com/jobs

NEW ON #DEVELOPJOBS

Our pick of new job listings from Develop's website

GAMEPLAY PROGRAMMERS

Employer: Sports Interactive
Category: Programmers
Salary: Competitive + Benefits
Type: Permanent
Location: London, UK

Sports Interactive, developer of the *Football Manager* series is seeking enthusiastic and committed gameplay/logic coders to work within a talented core gameplay team on a title specifically for the Asian market. Candidates will preferably have online gaming experience and strong interpersonal skills.

Find out more and apply at: http://bit.ly/1auHOBw

WEB DEVELOPER

Employer: Jagex
Category: Development
Salary: Competitive + Benefits
Type: Permanent
Location: East Anglia, UK

Jagex, the independent online games studio, is looking for a talented website developer to join its website development team. The company currently has multiple titles underway in addition to third-party publishing opportunities, and is looking to expand its team to cope with increasing demand.

Find out more and apply at: http://bit.ly/1hqa3Xl

MOBILE PROGRAMMER

Employer: Eutechnyx
Category: Programmers
Salary: Competitive
Type: Permanent
Location: North East, UK

Eutechnyx is seeking a mobile programmer to develop iOS and Android titles in its newly-established mobile division. Working with licences such as NASCAR and *Warhammer*, the successful candidate will have the opportunity to make an impact on the development of Eutechnyx's mobile titles.

Find out more and apply at: http://bit.ly/1eD8dPW

Follow us at: **@develop_jobs #DevelopJobs**
To see our full jobs board or to post your own job ads, visit us online:
www.develop-online.net/jobs

VICON

Vicon Cara

Don’t settle for just X and Y.
True Z data for true facial capture.

Email cara@vicon.com to book your demo.

www.vicon.com/systems/cara

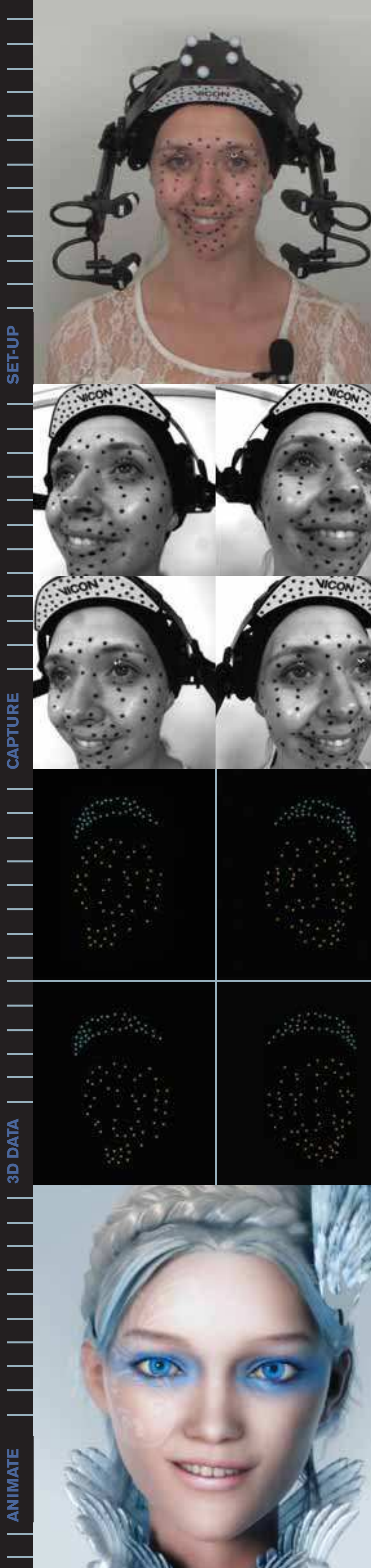
SET-UP
Fit the Cara HeadRig to the actor.

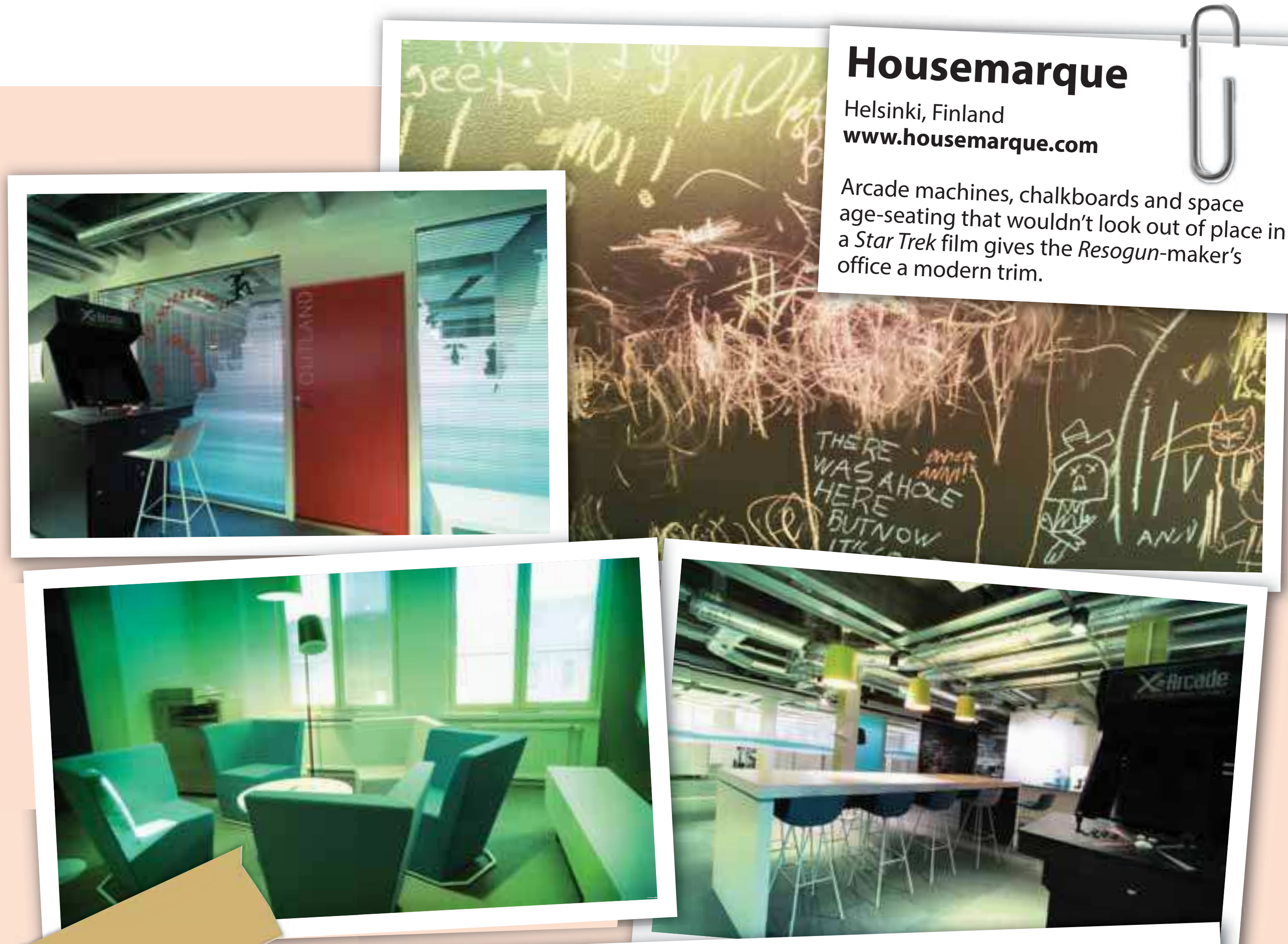
CAPTURE
Stream four synchronous HD cameras into CaraLive.

3D DATA
Process your 3D point data in CaraPost.

ANIMATE
Export into your pipeline and apply to the character.

A World in Motion.




MOI!
THERE WAS A HOLE HERE BUT NOW
X-Arcade

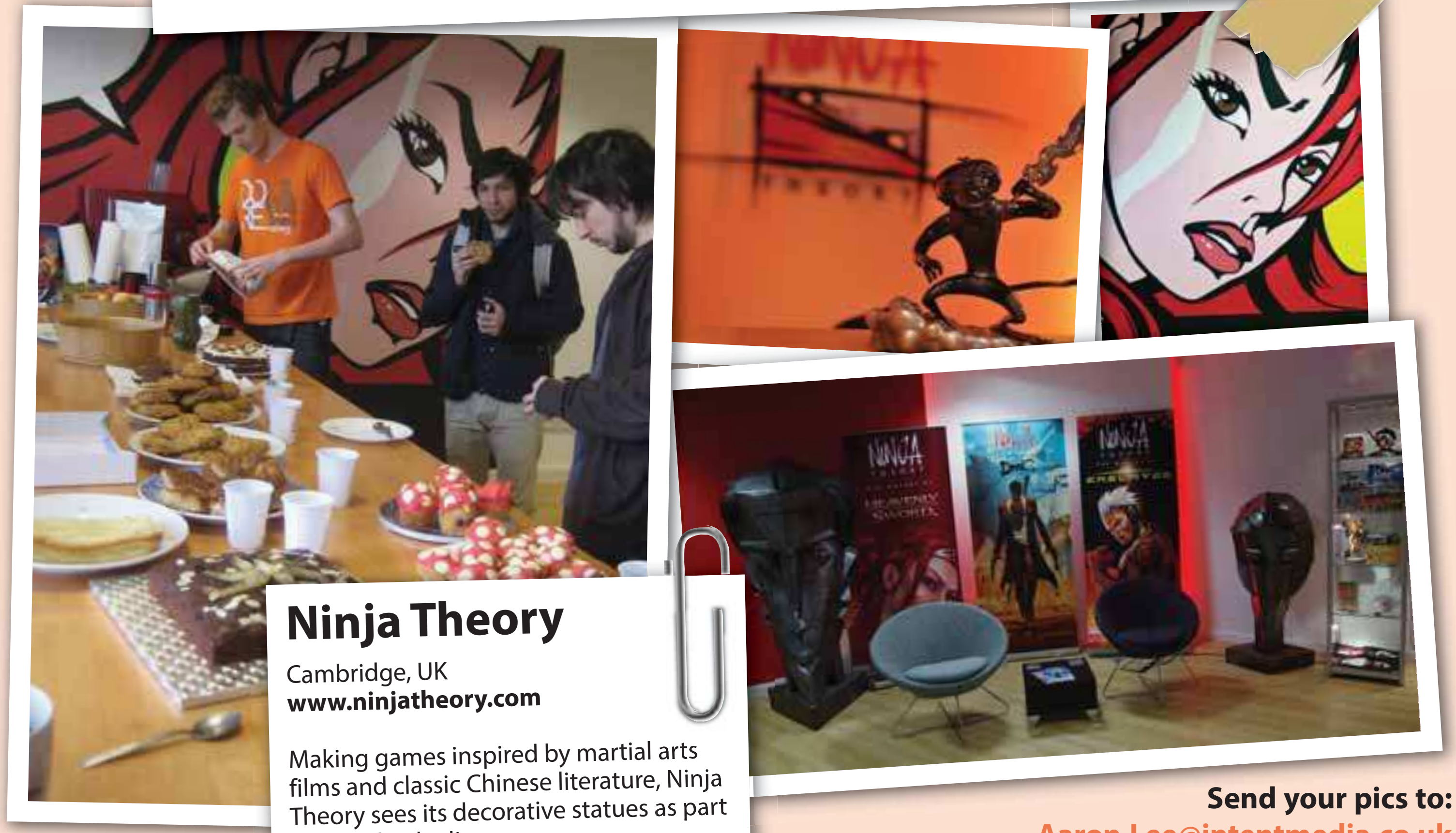
Housemarque

Helsinki, Finland
www.housemarque.com

Arcade machines, chalkboards and space age-seating that wouldn't look out of place in a *Star Trek* film gives the *Resogun*-maker's office a modern trim.

THIS IS **WHERE WE WORK**

Opening the doors to studios around the world


NINJA THEORY
NINJA THEORY HEAVENLY SWORD
DmC
NINJA THEORY ENSLAVED

Ninja Theory

Cambridge, UK
www.ninjatheory.com

Making games inspired by martial arts films and classic Chinese literature, Ninja Theory sees its decorative statues as part of its individuality.

Send your pics to:
Aaron.Lee@intentmedia.co.uk

THE BEST PEOPLE
MAKE THE BEST GAMES

SUP
ERC
ELL

JOIN OUR TEAM
SUPERCELL.NET/JOBS

BUILD

THE LATEST TOOLS NEWS, TECH UPDATES & TUTORIALS

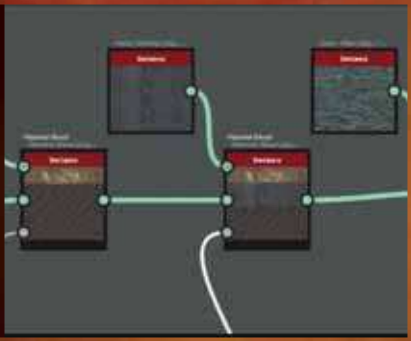
A look behind the unique sounds of Tearaway p57

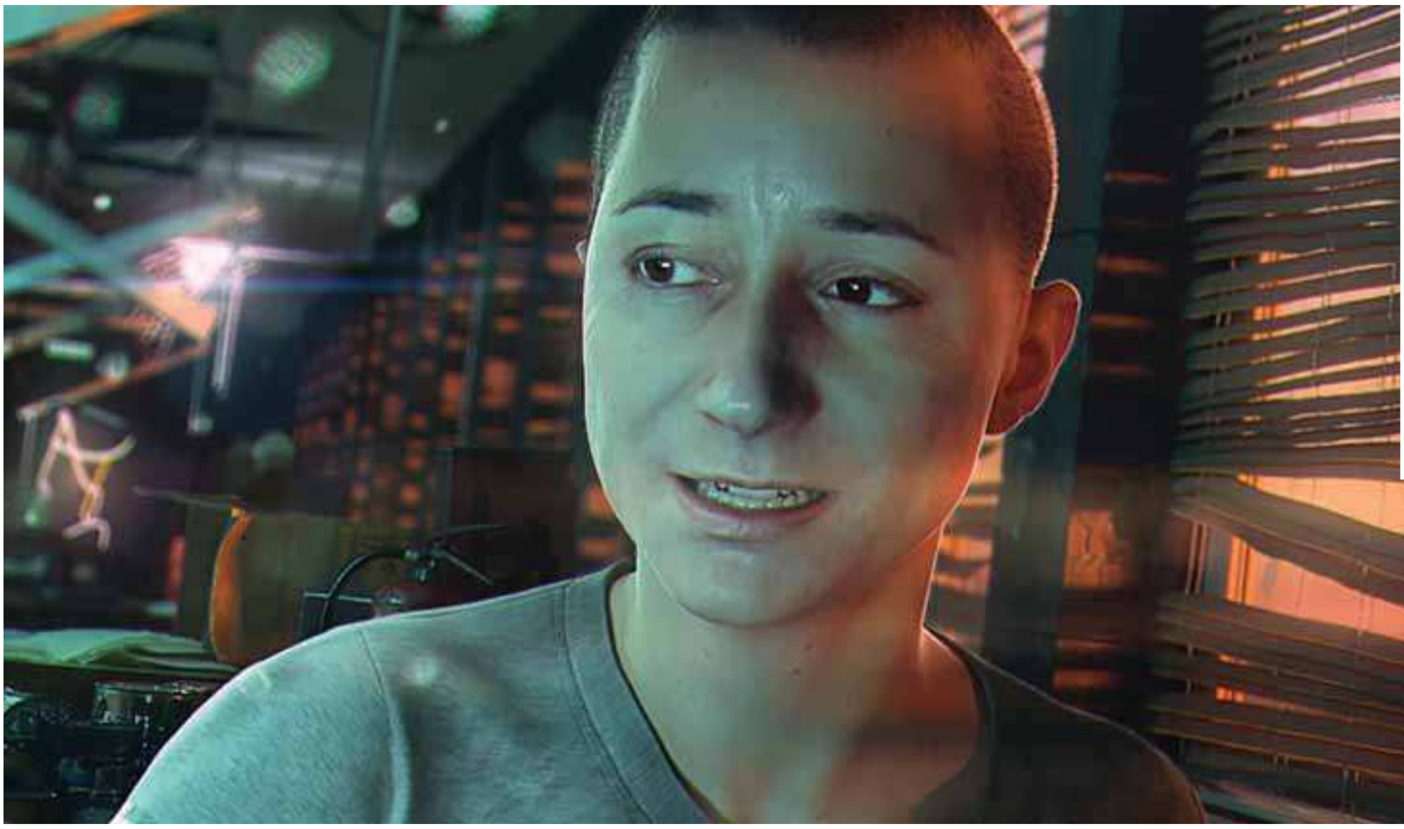
The new face of performance capture

3Lateral, Cubic Motion and Side have begun collaborating on providing services to the industry. Develop investigates just what lies behind its new Synchronicity tech demo, p50

The new game engine on the block: Chimera p52

Uncovering Allegorithmic's Substance Designer 4 p55





To the power of three

When Side, 3Lateral and Cubic Motion joined forces to craft the Synchronicity performance capture tech demo, they also built a testament to collaboration. **Will Freeman** investigates what the free firms are up to

The Synchronicity tech demo (main) is designed to showcase what's possible in the world of performance capture for triple-A games today.

Above right (from left to right): Side MD Andy Emery, 3Lateral CEO Vladimir Mastilovic and Cubic Motion CFO and chairman Simon Elms

WHEN SIDE, CUBIC Motion and 3Lateral teamed up to produce the recent Synchronicity demo, they had something special in mind.

There are many tech demos out there, but these often show conceptual glances deep into the games development crystal ball, or the likes of floating heads, showcasing a single specialist discipline in isolation, abstracted from its contribution within a wider game.

Synchronicity, meanwhile, is an attempt to demonstrate the cutting edge of production-ready facial animation and rendering, along with performance capture and game acting at its most nuanced and liberated. Watch the two-and-a-half-minute short, and it's apparent that it is a work from the forefront of triple-A, but it is also a sample of what devs can implement in their games today, rather than in months' or years' time.

The emotionally charged, thematically dark composition is also a showcase of the increasing potential of – and necessity for – collaboration in the world of performance capture and delivery.

Recognising this, Side, 3Lateral and Cubic Motion decided it was time to make such a demo. The nature of their work on commercially released games is so often draped in embargoes, all three had become frustrated by an inability to show their creations until anything produced was already outdated.

"We've had it, as three outsourcing companies, where we've worked on various big projects, but been frustrated in the past by the fact that we can't showcase anything we've worked on publicly until a point where everything had moved on," explains Side MD Andy Emery. "The very nature of our work means we're very restricted on what we can do. Even if there's a game with a making of video, our companies' names typically wouldn't be attached to what was being showcased."

Subsequently, developers too suffer from not seeing the most contemporary production work themselves. Quite simply, Side, 3Lateral and Cubic Motion needed a way to show more teams what could be done using contemporary, practical techniques and tech.

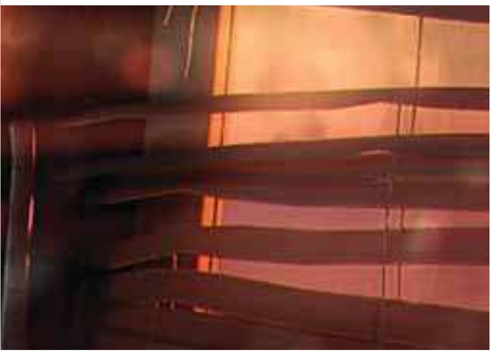
CAPTURING THE IMAGINATION

And so it was they embarked on producing Synchronicity. Side handled the capture, voice recording, casting, writing and direction, head rigging specialist 3Lateral made the demo's digital doubles, while Cubic Motion took charge of the animating itself, using its proprietary technology.

"We wanted to create something we could share, and that was completely in our control, where there was no sacrifice made to compression, or many of the other restrictions we sometimes face," confirms Cubic Motion's Simon Elms, who stands as chairman and CFO. "It's a demonstration of what we can do if we work together closely, and goes a way to prove why we should."

It's certainly a striking piece of work, offering a performance by actress Lydia Leonard that would do much in a game to convey character, emotion and a sense of humanity. But what is important, says

THE MAKING OF THE SYNCHRONICITY TECH DEMO



3Lateral CEO Vladimir Mastilovic, is the way in which it is applicable to games development pipelines and processes.

"Compared to something like *L.A. Noire* the approach we used has many advantages," he insists. "The technological approach of having 4D scanning output in games comes with huge drawbacks. The shoot on set restricts interactions between actors. Those actors usually have to sit in a room in isolation to deliver their performances, and they usually can't even move too much, instead acting with restrictions. And the amount of data 4D scanning takes up inside the engine is enormous. It's just not very practical and editors are not able to edit the performances or retarget it to make characters look different. And reuse of the animation is really impossible."

The approach and pipeline used to make Synchronicity, starting with head-mounted cameras in the sound booth and concluding with CubicMotion's work applying 3Lateral's efforts to its rigs, is according to those behind it more efficient, flexible, and readily applicable to existing pipelines. It's also argued to offer less time-consuming editing, considerably more practical retargeting, and let studios apply changes across a project.

"What we were able to do was take the inputs from Side, which are greatly advanced compared to just a few years ago, analyse the data – of which there's a great deal more of today – and get more from it than ever before," explains Elms of the process. "Then we worked very closely with Vladimir and his team in terms of getting the CG assets and translating that data."

Synchronicity itself is in fact not a demo of a packaged service, or a set-in-stone pipeline; rather it is a taste of the potential of Side, Cubic Motion and 3Lateral working in unison. Each remains dedicated to providing its services separately, together or with other outfits, and the methods used to create Synchronicity are but one way the trio of specialists can work together.

LEARNING THROUGH COLABORATION

According to Emery, the approach particular to the case of Synchronicity was also one that allowed them to maximise each of their own disciplines. Side, for example, were able to give their actors far more freedom as a result of understanding the requirements of their partners more readily, and reap a great deal more from recording and capture sessions. In effect, producing Synchronicity served as a learning process for all involved.

> ***"The three of us, by working closer together, have a greater understanding of both the creativity needed and the pipeline."***
>
> Andy Emery, Side

"Thanks to the technology provided by Cubic Motion and 3Lateral, and the way we can work so closely together, we able to do far more with our actors. The three of us, by working closer together, have a greater understanding of both the creativity needed and the pipeline, as well as the implications of that pipeline.

Indeed, the same methods would have allowed for Side to start with full performance capture, work on a sound stage, or even using multiple actors in a large capture volume.

COME TOGETHER

Synchronicity additionally demonstrates something beyond technology and technique. It also sets an example of why collaboration matters; something already providing those involved with tangible benefits. Previously, the three outfits have worked on the same products, but only found out that is the case months after their work starts, as clients fail to realise the potential of connecting those providing performance and animation services. With Synchronicity setting an example of what unified collaboration can achieve, clients can better understand why connecting service providers on a project can yield superior results.

"This demo has already changed the way we speak to clients, because they are seeing Synchronicity, and they like what they see," explains Mastilovic. "They ask us how we achieved it, and we can talk about working together, and so help them make the right decisions to get the best results. Of course, they have other considerations around the bigger picture, like budget and time, so there may always need to be compromises. But when they are deciding on the compromises, if we can give them all the information about the entire process, they can make the decisions in the right way."

Working on the project, effectively positioning themselves as their own clients, Side, 3Lateral and Cubic motion have also learned much about how to better serve one another. They have, of course, previously been well aware of what each does, but are today feeling increasingly empowered by the fringe benefits of collaboration.

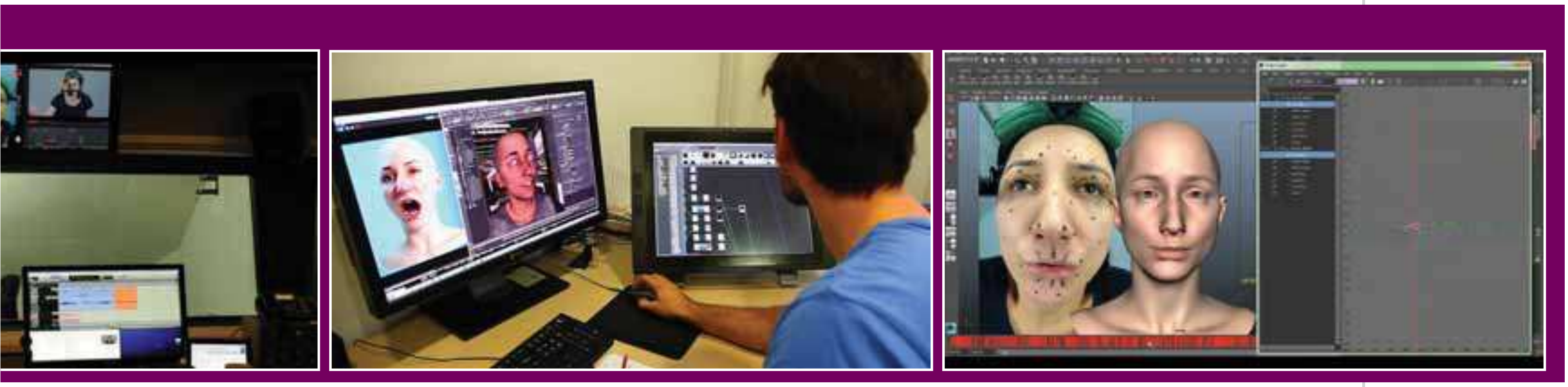
"We all got a greater understanding of all the processes involved by functioning as a single force, which has been great," offers Emery. "As a result we've all learned more about one another's disciplines. That's hugely important in a meeting with clients."

With Synchronicity complete and making its way to the monitors of ever more developers, it is back to business as usual for Side, 3Lateral and Cubic Motion. Each continues to work together – and separately – on a wealth of high-profile projects they are not at liberty to discuss. And each has been pushed by the experience, and is optimistic that they can deliver similar or better results if a client is added to the mix, even with the realities of deadlines and budgets remaining an important consideration.

Potentially, Synchronicity is a significant leap forward for each of the outfits, along with advancement of the disciplines they practice, and, ultimately, the games their future clients will produce. This is great news for both developers and players, because in the end, it is about making games more engaging through more believable characters.

You can watch Synchronicity at **www.s3c.tv**, or by downloading the iPad edition of this issue.

The Synchronicity tech demo (below) takes advantage of the technology from 3Lateral, Cubic Motion and Side



Something from nothing

Zero Dependency has turned from indie to an ambitious middleware provider. But what makes its forthcoming Chimera engine stand out from the crowd? **Will Freeman** caught up with the outfit's technical director Andy Esser

For readers who aren't aware, what is Zero Dependency's story, and what makes you distinct in the world of middleware?
Andy Esser, technical director: Zero Dependency was formed in 2010 by Phil Hurst and myself. We were looking to create fun, engaging and beautiful games. More recently, however, we've focused on creating powerful tools and middleware to help serve the increasing accessibility of development.

What motivated you to start building a new game engine? What was the gap in the market you saw?
Whilst conducting research for developing our own games we discovered that many of the options out there weren't really suitable to us. They either catered for high accessibility, and therefore delivered low power and control – or the opposite but were then very expensive.

Personally, I love getting stuck in and finding out how everything works. However, with many of the development tools that just wasn't possible. I found that lack of control really infuriating.

On the other hand, engines that seemed to provide you with all the power in the world were restrictively priced. So much so that a small indie team just couldn't even hope to use it. We decided there had to be a middle ground, a set of tools focused on improving workflow without costing a fortune.

And what are the Chimera's engine's key distinguishing features? In other words, what defines it as an engine?
We are focusing heavily on having a really clean, powerful workflow that can cater to all team sizes and requirements. Of course beautiful graphics and powerful physics are important but that doesn't mean anything if it takes months or years to generate a scene.

A couple of key areas we're working on are getting assets into the editor, and then getting games onto target platforms as easily as possible. We're working on tools that will allow artists to live preview content from Autodesk Max and Maya direct in the editor to see how a particular asset will look or impact the scene.

Another tool helps test your game content, including gameplay, effects, assets, audio and physics interactions, directly on the target device. Developers will be able to make changes in the editor in real-time and see how they appear on the device.

We're also working on a set of tools for offline processing that can be incorporated into a continuous integration pipeline. For example pre-processing art assets into formats that take advantage of platform specific features and data layouts. This reduces loading and processing times when gamers load a game, whilst cutting down on 'dead time' for developers.

These are fairly standard tools within triple-A studios and engines, but aren't really provided for smaller teams. We want to bring that power to the smaller studios so they can concentrate on creating amazing works of art, without having to spend much time optimising a pipeline or trying to reduce the size of packaged assets.

All of these features help towards streamlining development, decreasing iteration time and an overall reduction of the cost of publishing a game to the marketplace.

Most of the features I've discussed so far are about getting assets into the engine, or packaging them up afterwards, but one of the key principles of Chimera is modularity.

Chimera is built on a cross-platform core which provides standard functionality for features such as file IO, threading, memory management and networking.

On top of this core we are building powerful rendering, physics, AI, audio and input systems – however developers are free to completely replace these systems with their own if they have an existing renderer, for example, or if they want to alter the behaviour of the physics.

This provides almost unlimited control of how each component works whilst not sacrificing accessibility as the default systems will be high-quality and high-performance.

We also support 'hot-reloading' of modules within the editor and debug builds on target devices, meaning that changes can be seen and tested immediately, without having to go through a lengthy or complicated build process.

The editor itself is also written with all these features in mind. For example, developers can write their own modules for the editor. They can create their own importers/exporters for asset types, a new UI system, or a network build system – whatever they need to improve their workflow and give them ultimate control.

You mentioned cross-platform. What platforms exactly does it target?
We're planning on deploying to a multitude of platforms, including mobile. However currently our focus is on PC, Linux and Mac, as well as the PlayStation 4 and the PS Vita.

The way that the core Chimera systems are written means that developers only have to write code once, and can then deploy to all of their required target platforms, once again cutting down on iteration time and giving developers more time to focus on what they do best: creating beautiful, engaging games.

What kind of studios is the engine being made for? Is there still an emphasis on smaller developers?
The benefits of Chimera are for all developers. Whether this is one or two man indie teams, or full-size triple-A studios.

With a price point that is not restrictive, we provide powerful, fast and extensible tools to ensure that developers can do what they need to do as quickly as possible.

Chimera is not designed for a specific type of game. It is equally suited to first-person shooters, 2.5D platformers, point-and-click games or any other kind of title that developers are working on.

It would be interesting to hear more on why Chimera particularly matters today. How does the make-up of the engine reflect trends or changes seen in the industry today?
We've seen a massive change in attitudes over the last few years. With game popularity on mobile devices increasing, more and more tools are appearing to allow anyone to develop games and universities offering more varied and higher quality degrees.

With the latest generation of consoles being released we've seen the major console holders opening up much more to independent developers. We can see this in the ID@Xbox program, or the very open nature of Sony who are happy to speak to any developer about getting their game onto the PlayStation systems.

All of this means that more people than ever are either working in, or considering a career in the games industry and we want to be right there, at the forefront, helping people to realise their dreams.

If a studio was to adopt Chimera, what do you think would be the most significant impact on the team?
The core principle of Chimera is improving workflow. We're hoping to push as much control onto the content creator – the modellers, the artists, the UI designers – as possible, allowing programmers to focus on improving gameplay, AI, physics and reducing the amount of time spent on bug-fixing and iterating.

> ***"The way the core Chimera systems are written means devs only have to write code once, and can then deploy to all of their target platforms."***
>
> Andy Esser, Zero Dependency

We're going to be creating really comprehensive documentation, coupled with online training videos, and in-studio training sessions as well, to reduce any hit to productivity during the retooling process.

We're building source control tools direct into the editor that will fit in with a developer's existing Git, SVN or Perforce systems to ensure that all their hard work is safe and available to the rest of the team.

How will the pricing and licensing of the engine work?
We're reviewing a number of licensing options, but right now we're looking at providing a one-off cost per major release, as well as a subscription model to help those studios where cash flow is an issue. We're hoping to provide a licensing model to suit all teams regardless of size and funding.

We will also be making all the Chimera tools available to download for free for non-commercial and academic users.

And when can we expect the first commercial release?
We're hoping to coincide our first commercial release announcement at GDC Europe. As much as we want to get teams using our tools as soon as possible, we also want to make sure everything is in a good state and that we're providing the tools and services that developers need.

Based on feedback from the beta participation right now we're looking at visiting interested studios to demonstrate Chimera to them and find out what more could be done to help their development.

We want Chimera to be the best tool possible, and for that we need honest feedback from as many people as possible in the industry.

How can studios keen to try your engine before then get involved?
Although we're still a few months from releasing Chimera, we are looking for studios who are interested in beta participation. For more information visit: **www.zerodependency.co.uk/beta**

Zero Dependency is working on tools to allow artists to live preview content from Autodesk Max and May director in the editor

THE DEVELOP QUIZ

LEAMINGTON SPA
LONDON
BRIGHTON

It's on the move

The Develop Quiz is headed to Leamington Spa

Sponsored by

CODEMASTERS®

February 26th

The Duke, Warwick Street,
Leamington Spa

To book your table please contact:
Kathryn.Humphrey@intentmedia.co.uk

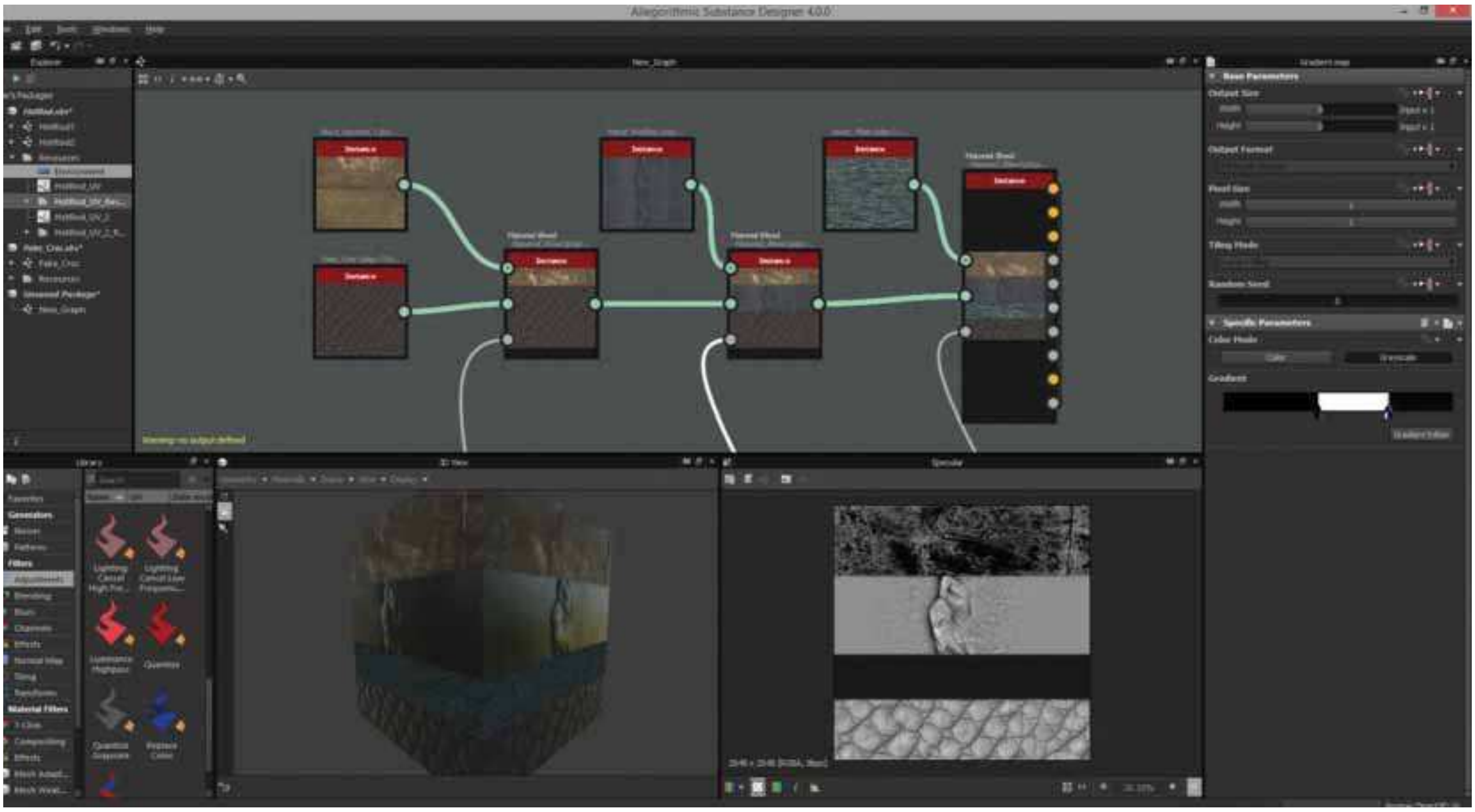
For sponsorship opportunities please contact:
Alex.Boucher@intentmedia.co.uk

Find your nearest quiz at: **www.develop-online.net**

KEY RELEASE

Will Freeman looks at Allegorithmic's new PBR tool Substance Designer 4

What is it? A texturing tool that embraces physically-based rendering and delivers a material layering workflow to boost productivity
Company: Allegorithmic
www.allegorithmic.com



Sebastien Deguy (above) says Allegorithmic's texturing tool, Substance Designer 4 (main), can improve productivity by allowing the work of one artist to be shared across a studio

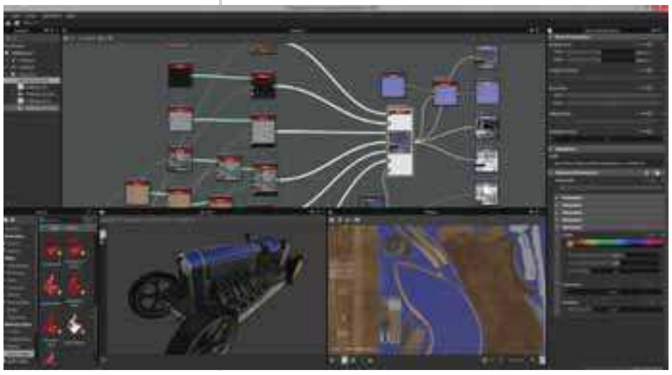
WITH XBOX ONE and PlayStation 4 now well out the gate, a broad range of tools companies have updated their products to better serve studios empowered by today's current-gen.

One such tools outfit is texture specialist Allegorithmic, which has recently launched Substance Designer 4, marking a significant update to its popular texture creation tool.

A wealth of new features have been introduced from fresh GPU-accelerated baking to a contemporary noise generator and hundreds of revised editing tools and filters. The most significant improvements, however, are around Substance Designer 4's new abilities with regards to physically-based rendering and shading, commonly known as PBR, and an efficiency-focused material layering node-based workflow.

GETTING PHYSICAL

Substance Designer 4's PBR-shading abilities come in the form of an included PBR GLSL shader conceived by Allegorithmic to be applied to a mesh via the tool itself. Such an update better meets the demands of the increasing numbers of developers adopting PBR techniques, which typically mimic the real-world behaviour of light reproduced in-game.



> ***"In all situations, you can now just use one shader for the whole scene."***
> Sebastien Deguy, Allegorithmic

"PBR being physically-based means that rendering techniques give results far closer to what's really going on out in the real world," explains Allegorithmic CEO and founder Sebastien Deguy. "The technique more accurately represents the way light behaves and the way it works when it hits an object. The good thing about PBR is that it does not require many lights in a scene. You can have just one for an environment map that lights the scene, and that's it. You don't have to put any more lights in the scene – unless you want to, of course.

"In all situations that means you can now just use one shader for the whole scene. You now have to define the materials in such a way that they react properly to this new rendering technique, but that's it. It's great for developers, because it's simple to set up a scene now, and it's lit brilliantly."

Dramatically reducing the shader count is clearly an important leap forward for games studios in general, but consider the plight of the texturing artist, who now has a new discipline to master and myriad map types to work with that, while not all new, may be less than familiar to many. That's where Substance Designer 4 steps in, by integrating its own PBR shader to take the onus off of those who would otherwise have to learn the nuances of numerous maps focused on the likes of opacity, 'metalic-ness' and roughness. Instead, users can visualise materials directly in the 3D view with Allegorithmic's embedded PBR shader.

A NODE TO JOY

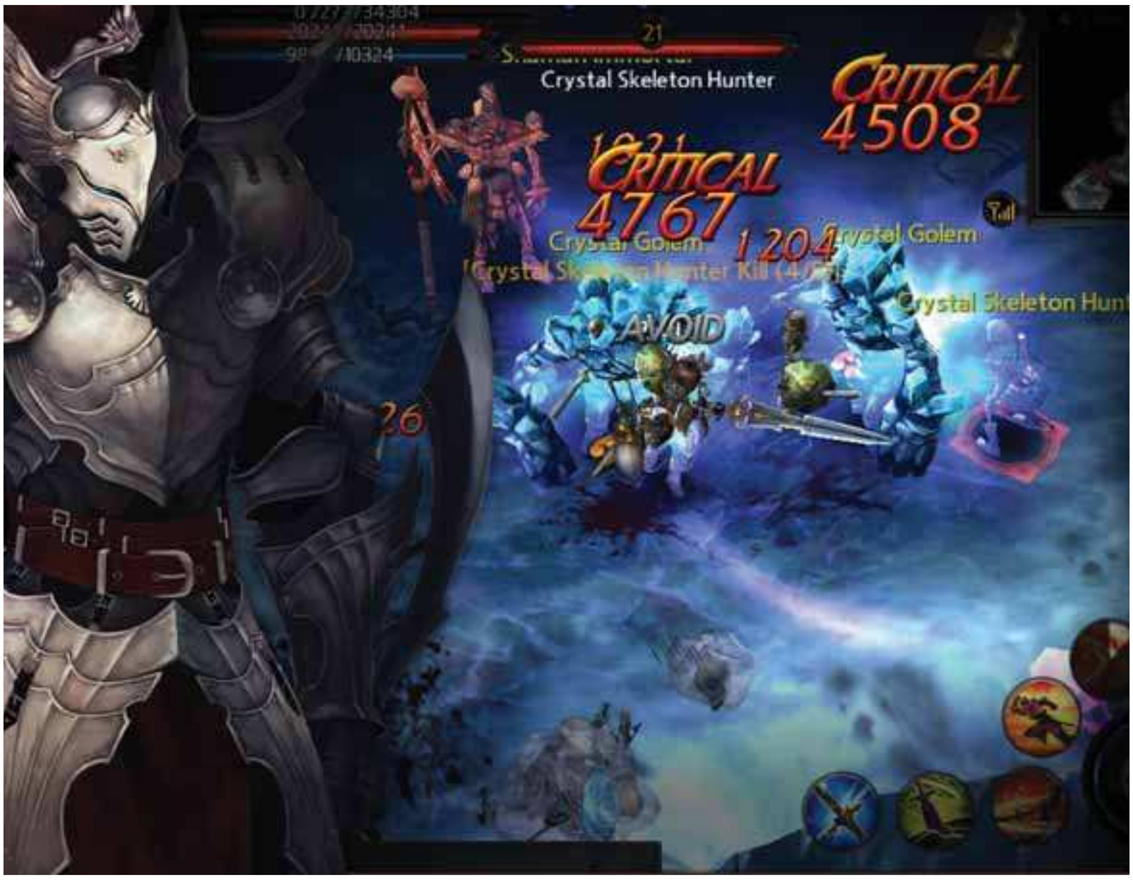
Meanwhile, Substance Designer 4's material layering workflow delivers a node-based, non-disruptive interface for those looking to create procedural textures. The workflow was apparently designed with rapid iteration in mind, and importantly, the ability to allow artists to quickly copy and re-use textures.

According to Deguy, Substance Designer 4's make-up and functionality is the result of the new generation of consoles and PC architecture, and the need to let developers harness their potential.

"The power of new games machines allows developers to use the physically-based rendering techniques, so it will become the norm very quickly," he says. "Consoles like Xbox One and PlayStation 4 will define a new minimum, and that minimum is PBR-ready. Developers are all coming to the conclusion they will be aiming for that now, and – combined with developers' needing to produce more art for bigger, more detailed games for other reasons along with PBR – a tool like Substance Designer 4 will become very important. It lets developers work smart." ■

UNREAL DIARIES

Online firm Gravity discovers what Unreal Engine 3 can do on iOS



When developing Tower of Ascension (above), Gravity says UE3's unified toolset made the demands on its team much more bearable

WITH SWORD-WIELDING warriors and spell-slinging wizards, fantasy role-playing and battle games are among the most popular mobile offerings, but few titles have been as ambitious as *Tower of Ascension*.

Published by Gravity Interactive, the North American arm of the Korean developer and publisher behind the internationally acclaimed *Ragnarok* series, *Tower of Ascension* is a free-to-play, action role-playing game that ventures beyond the status quo of mobile offerings to hook players with beautiful visuals, deep mechanics and fierce multiplayer battles on iOS devices.

UPCOMING EPIC ATTENDED EVENTS

DICE Summit 2014
February 4th to 6th
Las Vegas, USA

Game Developers Conference 2014
March 17th to 21st
San Francisco, USA

PAX East 2014
April 11th to 13th
Boston, USA

Email ***licensing@epicgames.com*** *for appointments and sign up for Epic's newsletter at unrealengine.com.*

"Our main goal was to create a mobile game capable of competing with high-quality, online PC games," says Gravity chief technology officer Jinsoo Jeon. "Most large-scale games were only available for single-player, but we were determined to create a game of the highest calibre that could also deliver memorable multiplayer experiences."

> ***"Unreal Engine 3 immediately proved its ability to provide exceptional optimisation results. This was a huge advantage."***
>
> Jinsoo Jeon, Gravity

Gravity needed a game engine capable of pushing visual boundaries and incorporating online components for team-based matches. With a combination of first-class tools and unbeatable optimisations for mobile games, Jeon says: "Unreal Engine 3 was the obvious choice for realising such a project."

He explains that visual fidelity was only one of Gravity's concerns. With 120 skills for players to unleash, special abilities and reactions such as knock-backs and stuns, as well as an original control scheme, creating many features in *Tower of Ascension* required close collaboration across technical and artistic disciplines.

"Having a unified toolset was the most impressive and beneficial feature of Unreal Engine 3," he says. "There were many functional and graphical demands made between programmers and artists throughout the development process. Being able to work co-operatively and fulfil the needs of both sides from within Unreal Engine 3 really helped increase productivity so we could focus on making an enjoyable action game."

SCALING THE TOWER

As a result of Unreal Engine's one-stop-shop nature, a highly impactful benefit for Gravity was the ability to both develop and iterate directly in the same PC environment. Jeon adds: "Even though we were making a mobile game, we were able to quickly set up events in Unreal Kismet and then run tests directly on the PC, which was really convenient."

Of course, creating a PC-quality game for smartphones and tablets presents unique challenges for even the most high-tech devices. Recent technological advancements have presented developers with the ability to create three-dimensional worlds and visual effects of unprecedented quality, but implementing such high-end features while ensuring a smooth gaming experience can be a delicate balancing act.

"Compared to desktop PCs, which can utilise components such as powerful GPUs, mobile devices have greater limitations in terms of system resources and functions. This is why optimisation is so vital to mobile game development. Unreal Engine 3 immediately proved its ability to provide exceptional optimisation results. This was a huge advantage, allowing us to put more time and resources into other areas of the project."

Jeon was very enthusiastic when asked what advice he would offer to other teams considering Unreal Engine for their mobile game developments.

"Developing a rich, lasting experience requires effort from many groups, so it's crucial to utilise a game engine that supports those groups while increasing productivity and avoiding any unnecessary complications. This is why we gladly suggest Unreal Engine to other mobile developers."

Jeon adds: "Unreal Engine has a very well-organised community. Not only are we able to share our own experiences, we learn new techniques from other game teams and receive support directly from Epic Games when needed. It is a pleasure to be a part of that group."

With the release of *Tower of Ascension* on the App Store, Gravity proves that ambitious ideas can become reality with the help of world-class technology. ■

www.facebook.com/towerofascension

Epic is hiring. To find out more visit: **epicgames.com/careers**

FOR MORE SUCCESS STORIES, VISIT: UNREALENGINE.COM/SHOWCASE

HEARD ABOUT

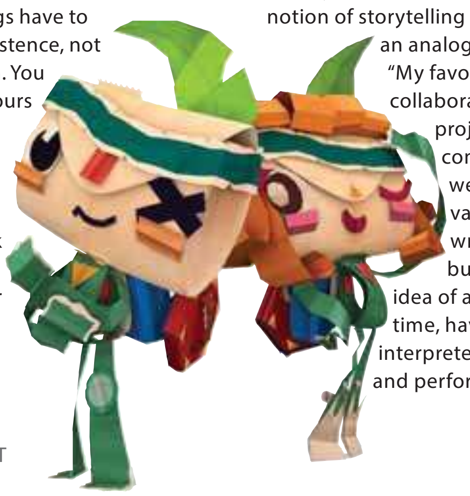
John Broomhall talks with Media Molecule's audio director and composer Kenny Young

Tearaway
Developer: Media Molecule
Publisher: Sony
Platform: PS Vita
tearaway.me

TEARAWAY OFFERS PLAYERS a tactile paper world in which they help a little papercraft messenger buddy deliver the message trapped inside their envelope-shaped head, from the papery world of *Tearaway* into the real world.

Kenny Young, audio director and composer at Media Molecule, explains where this leftfield idea came from: "The kernel of the project was Rex Crowle, *Tearaway*'s creative director, considering how to make use of Vita's unique rear touch pad and having the idea of one's (virtual) fingers cleverly emerging into the gameworld from underneath the console. That spawned the idea of a tactile papercraft world you could poke and rip through. Then we built on all Vita's other features – traditional gaming controls, front touch, gyros, accelerometer, front and rear cameras, and even the microphone – in ways that really integrated with the world and story.

"Early days on the project were pretty frustrating. Folks would moan it wasn't sounding papery, and I'd bang the same drum: the game might look papery, but nothing behaves like paper. If nothing in the world moves, there's no excuse to make it sound papery – things have to unroll or tear into existence, not just slide onto screen. You need papery behaviours to describe with sound, like unfolding or ripping to shreds. That's why games with a papery schtick usually fail at pulling off the illusion: paper isn't just a look or a sound that you can crowbar in.



"So when the game world started bending, flexing, folding, crumpling and tearing like paper, it became infinitely easier to back it up with sound; subtle stuff like the little sound a flap of paper makes when your messenger walks over it.

"But paper has a limited range of sonic possibilities, so you can't afford to be slavishly literal the whole time. Conversely, if you ignore the papery requirement, you fail to support the illusion. Striking that balance and developing that language and aesthetic was a big focus. It was also an early aim to push the ambient soundscape and not have music everywhere. Giving the player a break from the intensity and purpose that music provides – thereby creating more impact the next time music appears – lets the world really speak for itself."

FOLK STARS IN THE FOLD

That said, *Tearaway* does feature a great deal of acclaimed original music. And it's not every day that folk music turns up in a game.

"Rex drew a lot from his Cornwall upbringing, so there's heavy folk-culture influence," explains Young. "*Tearaway*'s papery world is formed from stories – the notion of storytelling in an aural tradition has an analogue in folk music.

"My favourite music-writing collaboration moments on the project, working with composer Brian D'Oliveira, were when I'd create variations on a tune he'd written, and then he'd build on top of those. This idea of a tune changing over time, having different versions interpreted by different players and performed in different styles in different cultures is a phenomenon you can see in folk music; it resonates with the game's encouragement for players to customise their experience in order to tell their own version of the story.

"There's a naive quality to the game's handmade papercraft aesthetic which finds a brilliant parallel in the handmade soundtrack. Folk music is the perfect fit. It doesn't have to be slick, even though it often is these days. For me it's about great tunes, dancing, honest emotions and stories about life.

"Embracing this approach opened the door to trying new things. We had a lot of fun playing instruments new to us. Brian even made some from paper – much of the percussion in his tracks is from paper contraptions he built. The soundtrack features a mad mix of unusual instruments: contra-alto clarinet, crumhorns, gemshorns, viols, gourde fiddle, hangdrum, bowed saw, pitched-up voice and a backwards violin.

"But this experimentation goes a lot further than us looking for an excuse to play with our toys. *Tearaway* takes the player on a journey, and music is a core part of that experience. The game starts out fairly folky, but over time it becomes deconstructed and surreal as the messenger gets closer towards their goal of leaving the paperworld and reaching the player in the real world.

"By the end, the music has gone completely analogue-electronic, passing through folk-infused, break-beat and dubstep, renaissance-hop and ambient mash-ups of earlier tracks. It's quite a ride." ■

Fresh from delivering LBP's quixotic soundtrack, Kenny Young (above) has brought folk music to games in Media Molecule's PS Vita debut (main)

John Broomhall is a game audio specialist creating and directing music, sound and dialogue. Find him at: **www.johnbroomhall.co.uk**

PITBULL BYTES

Senior programmer Matthew Griffin explains why, despites stories of crunch, he's glad to be back in games development

Matthew Griffin says starting a family changed his outlook on working the games industry's notoriously long hours

WHILE PEOPLE MAY disagree whether 'crunch' is a necessary evil or something that should never happen, the assumption is usually that it's in the aid of creating a great game in the end.

This hasn't always been the case in my experience though, and the recent insights on *Deadpool's* troubled development from a former High Moon Studios employee brought to mind that feeling of being forced to give up your life for something that was never going to be critically acclaimed or set the charts on fire. The case of *Deadpool* seems particularly heart-breaking as I would genuinely have loved to see it become a great game. There's perhaps nothing worse than working overtime on a game that you don't believe in at all.

I probably shouldn't complain too much as I've heard much worse horror stories than this. Thankfully, I'd say that I haven't had too many experiences like that and I consider myself pretty lucky to have worked on a game that I truly thought could be great. I might have promised myself that I was never going to work crazy hours again and while I still probably worked less overtime than others on that project, that belief still made a difference to how those late nights felt. Of course, it wasn't perfect and the end result might not have been quite what was expected, but I can't bring myself to look back on that time negatively because we were always aiming high.

PROGRAMMING PI

Even so, I have always considered my own quality of life pretty highly after that, especially as I've moved in the direction of starting my own family. I've had a break from the games industry in a closely related field but found myself drawn back eventually. My current role feels different again from my previous work, with a strong focus on there being no forced overtime at all and flexible working hours.

It perhaps doesn't always feel as 'glamorous' as other aspects of games though – I've gradually realised that I'm the kind of person who's quite happy to be part of a collaborative work and help others to create the best game possible, even if what I've done might not be obviously visible. It sometimes feels like everyone in the games industry wants to 'go indie'. And while I think everyone has ideas for games that we'd like to work on, I've never been the kind of person who thought I could quite happily quit my job tomorrow just to go and make them.

> ***"I hope that people are becoming aware that they can work in the field they love and still have a good quality of life."***

That's not to say that I haven't worked on anything that would see the light of day. Partnering with Epic has led to me working on *Gears of War: Judgment*, easily the biggest game I've ever been part of. Specifically looking at bug fixing proved to be a nice change of pace – you have to act more like a detective than a developer – but without the late nights and takeaway pizza that normally accompanies it. Others have had the opportunity to work on very interesting areas of technology and even fly out to collaborate in person.

Working outside of the games industry has perhaps also prepared me for a more structured approach of working for a client or as a contractor. Outside of games it felt like the old adage of 'the customer is always right' applied quite a lot, in terms of being restricted to exactly what the client wanted, whereas in games I felt more free to creatively come up with the best solution. My role now seems somewhere in the middle of that, where your ability to think for yourself and be creative in solving problems is valued as part of set tasks.

I'm not sure whether my experience of wanting to return to the games is a growing phenomenon. I always remember being told stories of those that had burned out and left games never to return – sometimes with a spectacular meltdown involved – but I would like to think that this is becoming less common.

I hope that people are becoming aware of the fact that they can work within the industry they love and still have a good quality of life. It's likely there will always be blips, either in terms of a rough period where work vitally needs to be completed or studios that do not appreciate their staff, but I would hope that we would gradually see less of the latter.

There will always be an element of the unknown in any creative project but we have already moved forward a huge amount in terms of planning and scheduling, when you consider the beginnings of games. And I think we are already reaching a point where costs for triple-A games are so high that you can't afford to wing it and keep throwing money at any problems caused by excessive overtime.

Working in games will never become an easy job but we can always aim for it to be rewarding and worthwhile. ■

jobs@pitbullstudio.co.uk

Matthew Griffin rejoined the games industry after working at UK Haptics on medical simulations. Previously he worked on *Wheelman* at Midway Newcastle.

ONLINE REGISTRATION AND DISCOUNT ENDS **MARCH 12, 2014**

Learn something new. Network with your peers. Be inspired.
Forge business opportunities. Discover market innovations.
Gain insight into the future of gaming. Play unreleased games.
Meet someone you admire. Create a "remember that time" moment.

Join us in San Francisco March 17-21, 2014.

develop READERS,
USE CODE GDC14DM
TO SAVE EXTRA ON ALL ACCESS
AND MAIN CONFERENCE PASSES!

GDC 2014 AT-A-GLANCE

400+ CONFERENCE SESSIONS
(Monday – Friday)
Lectures, tutorials, bootcamps, and roundtable discussions across 7 tracks and 8 summits, led by top industry experts

DIVERSE EXPO FLOOR
(Wednesday – Friday)
Connect directly with company reps and check out the latest gaming middleware, hardware, software and product demos

BUSINESS & CAREER DEVELOPMENT
(Wednesday – Friday)
Make connections, gain insight, and get advice at the GDC Business Center, Career Center and the Game Career Seminar

PARTIES, EVENTS & SPECIAL EXHIBITS
(Monday – Friday)

NETWORKING OPPORTUNITIES
Playable games from top emerging studios and developers at GDC Play & IGF Pavilion

INDEPENDENT GAMES FESTIVAL

GAME DEVELOPERS CHOICE AWARDS

GDC

GAME DEVELOPERS CONFERENCE®
MOSCONE CENTER · SAN FRANCISCO, CA
MARCH 17–21, 2014 · EXPO: MARCH 19–21, 2014

REGISTER AT GDCONF.COM

UBM Tech

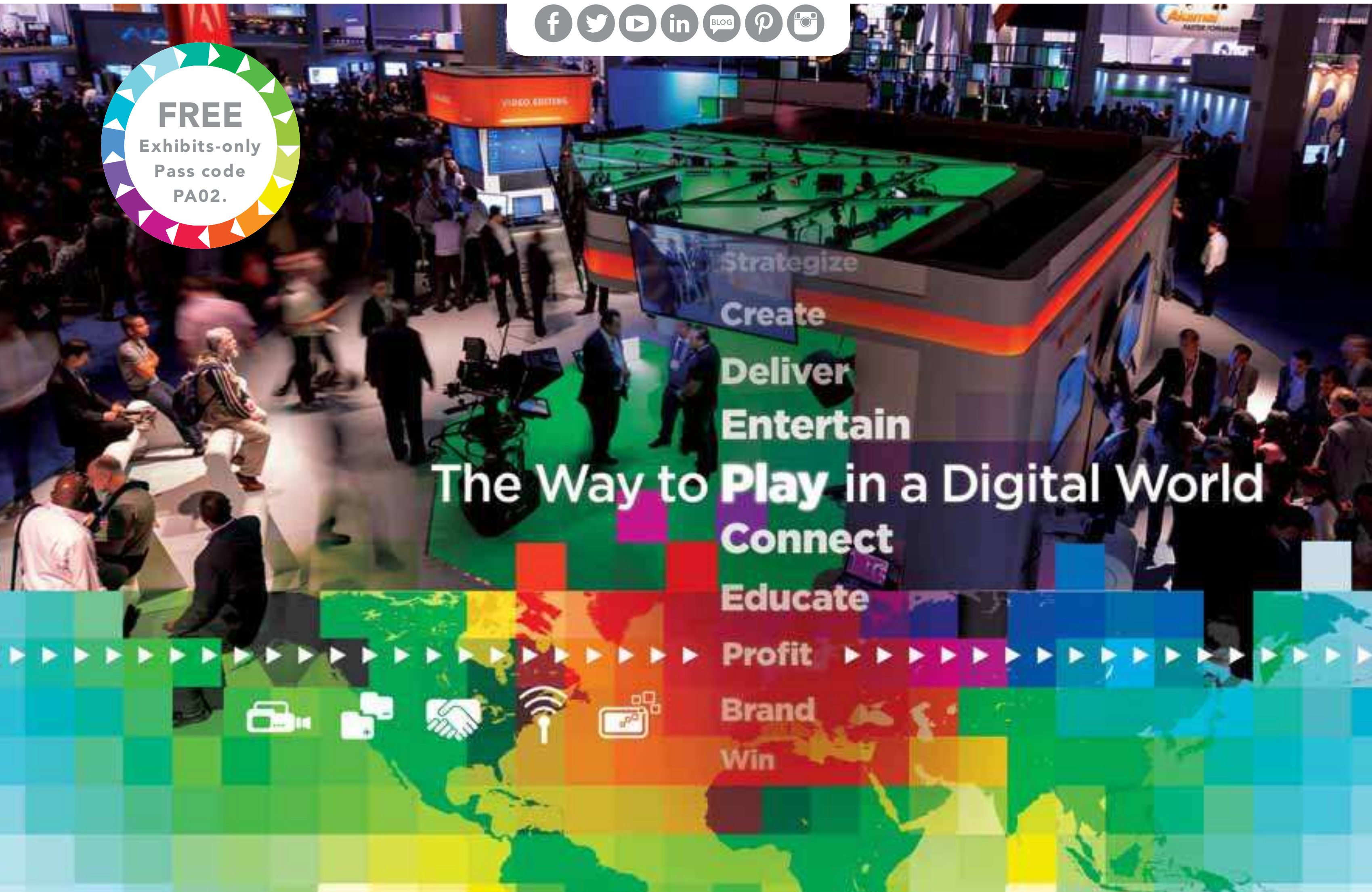
CHANNEL
OPPORTUNITY

The advances at play in media and entertainment have created unprecedented opportunity for you to deliver innovation to the connected consumer. The digital insight you need to accomplish your goals — and play to win — is here. Global to mobile, live to archive, sound and picture — from previs to post, big data or small market, NAB Show® is your channel. And this is your opportunity.

NABSHOW®
Where Content Comes to Life

Conferences: April 5–10, 2014 | **Exhibits:** April 7–10 | Las Vegas Convention Center, Las Vegas, Nevada USA

Join Us! #nabshow | www.nabshow.com


FREE
Exhibits-only
Pass code
PA02.
Strategize
Create
Deliver
Entertain
The Way to Play in a Digital World
Connect
Educate
Profit
Brand
Win

DIRECTORY

The world's premier listing of games development studios, tools, outsourcing specialists, services and courses…

SERVICES SPOTLIGHT:

Babel Media

p62

TOOLS SPOTLIGHT:

NeoAxis 3D Engine

p63

TRAINING SPOTLIGHT:

University of Huddersfield

p64

KEY CONTACTS

Amiqus	+44 (0) 1925 839700
ARM	malideveloper.arm.com
Epic Games	+1 919 870 1516
Eutechnyx	eutechnyx.com/IDidItHere
University of Hull	+44 (0) 1482 465 951

develop DIRECTORY

GREAT ADVERTISING OPPORTUNITIES

RATES
1/4 page: £450
(or £200/month if booked for a minimum of six months)

CONTACT:
Alex.Boucher@intentmedia.co.uk

T: 01992 535 647

Discover a global network of talent today…

Amiqus provide specialist recruitment solutions for the Games Industry.

Call 01925 839 700 or visit amiqus.com

amiqus recruitment specialists for the games industry

SERVICES SPOTLIGHT

This month: **Babel Media**

Babel Media
1751 Rue Richardson
Bureau 8400
Montreal, Québec
Canada, H3K 1G6

T: +1 514 904 3700
E: info@babelmedia.com
W: www.babelmedia.com

Babel Media CEO Richard Leinfellner (above) says his team provides a wide selection of QA and localisation services to multiple platforms. A staff football team is just one of Babel's studio activities

BABEL MEDIA PRIDES itself on ensuring that the games you ship are free of show-stopping bugs and breaks. It has been operating for more than 12 years and has built up an impressive list of clients in that time, including Sony Computer Entertainment, Ubisoft, Take-Two and Nintendo.

"We know there is no such thing as a 'standard project', so we work closely with all our clients to ensure we fully understand their needs, constraints and expectations, making us a logical extension of their own processes," says CEO Richard Leinfellner (*pictured above*).

Babel provides a broad canvas of quality assurance services that include gameplay testing, localisation, audio production, console submission and mobile certification.

"We have been very successful in evolving partnerships and increasing our responsibilities," says Leinfellner. "In one such case a triple-A publisher initially used Babel just for localisation QA services, based on their own testing strategies. Over a relatively short period of time we successfully expanded the relationship to include advising on game design changes to better cope with the needs of new languages. This resulted in a superior experience and reduced their costs due to a redesigned content pipeline."

Relatively recently, Babel began to introduce a new, competitively-priced app testing service, called TestMyApps. Through this service, Babel will test mobile games on a huge range of handsets and mail the results directly to the client.

Leinfellner feels that in today's competitive market developers and publishers should devote all their time to ensuring great gameplay. Of course, time and budgets don't always make that possible, but, Leinfellner says that Babel's experience and reliability is why developers should come to them for help.

"We work on more games than any individual client – over 1000 games per year. So by testing more, coupled with great processes and methodologies, we are optimally placed to find issues well before the consumer has a disappointment. We deliver super-quality, however, unlike captive QA groups, you only pay when you need us, and never when you don't."

Amiqus 01925 839700 **www.amiqus.com**

Discover a global network of talent today...

Amiqus provide specialist recruitment solutions for the Games Industry.

Call 01925 839 700 or visit amiqus.com

amiqus recruitment specialists for the games industry

Arm **www.malideveloper.arm.com**

ARM
Optimize graphics experiences for mobile devices
mali
Visual Computing by ARM
Mali Developer Center
LEARN
DEVELOP
ENGAGE
malideveloper.arm.com
The Architecture for the Digital World®

TOOLS SPOTLIGHT

This month: **NeoAxis 3D Engine (NeoAxis Group)**

NeoAxis Group
Forest Town
Kazan
Russian Federation

T: +7 905 314 8168 (Russian language only)
E: neoaxisgroup@neoaxisgroup.com
W: www.neoaxis.com

Ivan Efimov (top left) says the NeoAxis 3D Engine is designed as an alternative to Unity and UDK and offers map editing and post-effects tools

OUT TO PROVE that Unity and UDK aren't the only development platforms around is the NeoAxis 3D Engine.

Created by founder Ivan Efimov *(pictured far left)*, the tool is capable of handling moderately complex environments and can throw plenty of polygons as it does it.

> ***The first time you fire up the map editor, you'll be able to make levels and scripts, without any tutorials.***
>
> Ivan Efimov, NeoAxis

"What makes NeoAxis different from competing engines, like UDK and Unity, is its price, ease of use and lack of limitations," says Efimov. "For example, to use complex post-effects for your projects in Unity, you need to buy additional licences. The same goes for deployment on Mac or other operating systems. With NeoAxis you get post-effects and Windows and Mac support out of the box, even in the free version. Everything you get in the most expensive version of NeoAxis, you get in the free version too."

In the free version users cannot change the source code of the map editor, whereas in the full version users can make alterations at will.

Titles in production that already use the engine include *Beyond the Voyage, Homura Combat* and *Elementary My Dear Majesty*.

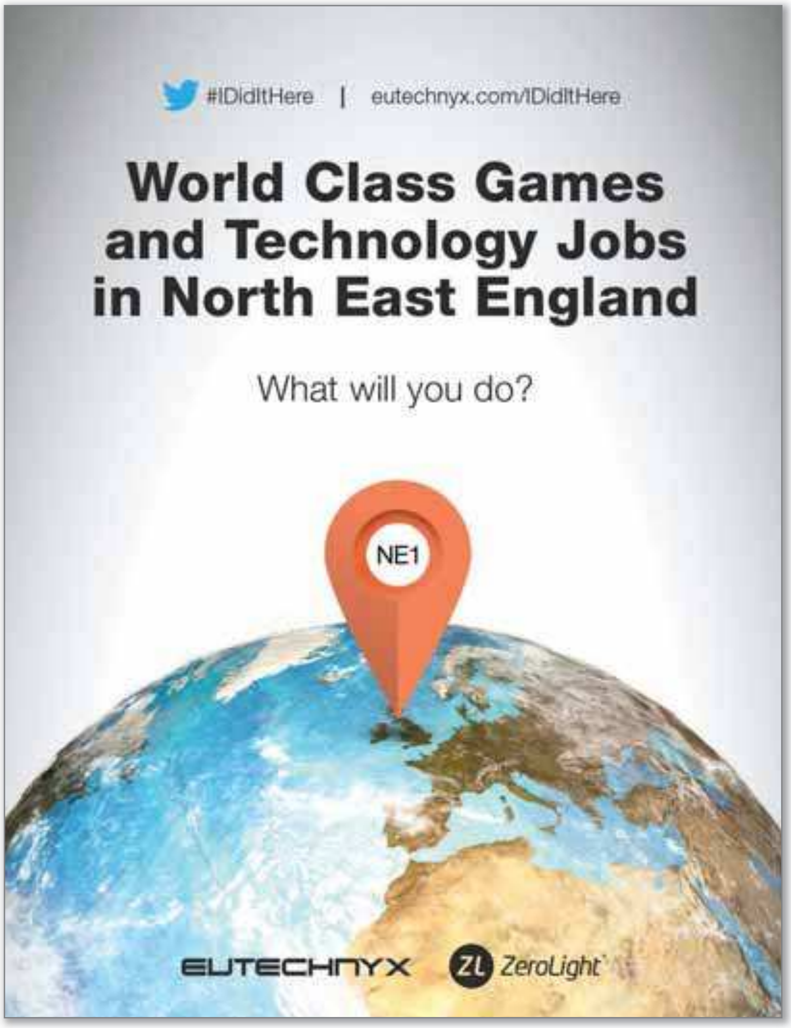
Just before the end of 2013, NeoAxis 2.0 was released. This update adds a component store, an online service for the sharing and sale of extensions, more platforms support in the form of Android, iOS, Windows RT, Linux and SteamOS, as well as the ability to deploy applications to web browsers.

Efimov says that NeoAxis's main advantage over UDK and Unity is its ease of use. "The first time you fire up the map editor, you'll be able to make levels, maps and scripts, without any tutorials," he says. "The engine is completely royalty free. You will never have to give a percentage of your project's earnings to NeoAxis Group.

Epic **+1 919 870 1516** **www.epicgames.com**

EPIC GAMES
ARE YOU READY TO BE A PART OF SOMETHING EPIC?
EPIC GAMES SEATTLE
EPIC GAMES CARY - HQ
EPIC GAMES POLAND
EPIC GAMES JAPAN
ChAIR SALT LAKE CITY
EPIC GAMES KOREA
Apply today at www.epicgames.com/careers

Eutechnyx **eutechnyx.com/IDidItHere**


#IDidItHere | eutechnyx.com/IDidItHere
World Class Games and Technology Jobs in North East England
What will you do?
NE1
EUTECHNYX
ZL ZeroLight

TRAINING SPOTLIGHT

This month: **University of Huddersfield**

SITUATED IN WEST Yorkshire, the University of Huddersfield has been teaching students the ins and outs of games art and programming for almost ten years.

"We try to make sure the course is always current. We work closely with industry partners and are always open to making necessary adjustments so the teaching reflects what's happening in the games industry," Ruth Taylor *(pictured far right)*, course leader for BA Computer Games Design, tells *Develop*.

The BA course is deliberately broad in the first year and covers both technical and creative aspects of games design and development. Students get to grips with scripting as well as 3D modelling, asset production, understanding games design principles, usability, interaction, teamwork and development.

"In 2006, we set up our own in-house studio, Canalside, which provides placement opportunities for a small team each year working on a variety of games projects," Taylor adds.

"This gives students and staff the opportunity to develop and publish. We have a strong track record of

University of
HUDDERSFIELD

The University of Huddersfield runs a number of courses for aspiring devs such as BA Computer Games Design and BSc Computer Games Programming

University of Hull **+44 (0) 1482 465951** **www.hull.ac.uk/dcs**

Games Education with a Reputation

UNIVERSITY OF Hull

18 years of educating video game professionals

- MSc Games Programming
- BSc Computer Science with Games Development
- MEng Computer Science with Games Development

"The University of Hull consistently provides Criterion Games with high quality game programming graduates. Our 2012 intake, from Hull, were instrumental in building out several of the features in Need for Speed Most Wanted" Paul Ross, CTO, Criterion Games

commercially relevant leading edge
professional software development

bcs Educational Affiliate

www.hull.ac.uk/dcs

skillset

develop DIRECTORY

GREAT ADVERTISING OPPORTUNITIES

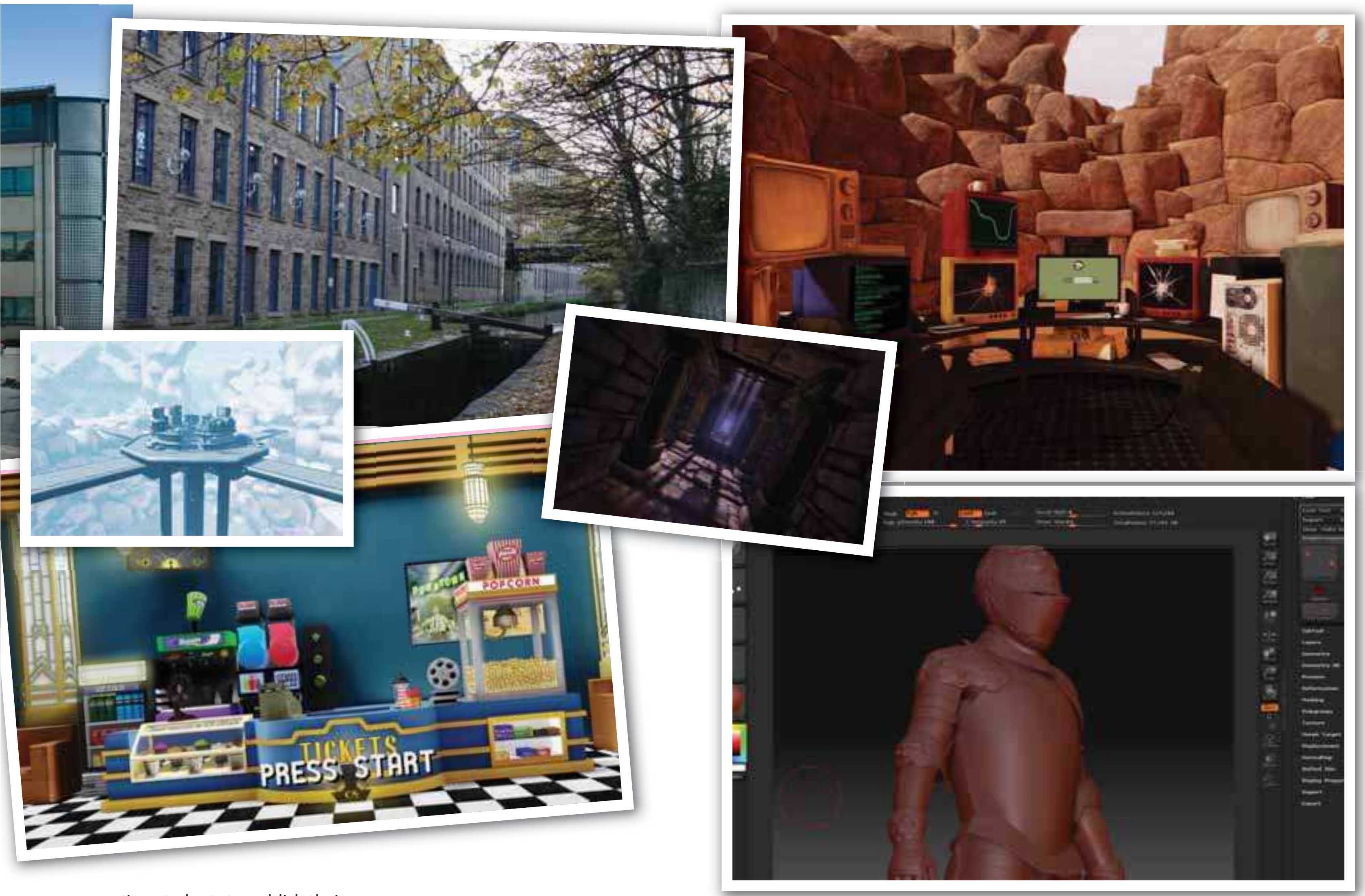
CONTACT: ALEX

alex.boucher@intentmedia.co.uk

Tel: 01992 535647

University of Huddersfield
Queensgate
Huddersfield
HD1 3DH
United Kingdom

T: 01484 473378
E: r.e.taylor@hud.ac.uk
W: www.hud.ac.uk



supporting students to publish their own games and for business start-ups. The university's 3M Buckley Innovation Centre provides office space for student start-ups, as well as a growing number of small games companies."

Along with its state-of-the-art innovation centre, the university gives students access to industry standard tools, such as 3ds Max, ZBrush, Photoshop, Unity, UDK and so on. Rolling licences for the tech helps ensure that it keeps up to date with the latest tools.

As students progress through the course, there is more opportunity to focus on particular interests and specialisms, such as 2D and 3D art, for instance, or animation, environments and games design.

Huddersfield places high importance on teamwork and production, and students from the BA Games Design and BSc Games Programming courses work together on project modules to develop their own games. And that process continues throughout the degree.

"Being able to demonstrate skills by having a finished game is a priority and we encourage students to self-publish," says Taylor.

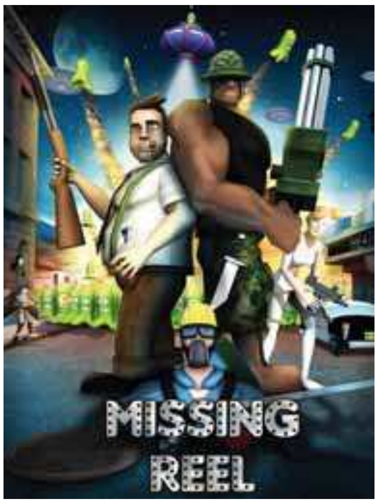
"By the time students reach their final year, we expect them to have a strong sense of their own specialist interests and to be producing highly individualised portfolios."

Being part of the Game Republic network, which includes many games companies in the Yorkshire region, gives the university a wealth of connections to the games cluster in its immediate area. The educational institution also has support from Red Kite, Team17 and Rockstar Leeds.

Of course, nothing says more than Huddersfield's roster of alumni, some of whom have featured in *Develop's* 30 Under 30 in the last couple of years.

Taylor says: "You'll find our graduates in many of the country's major games companies, as well as some working in the States and Europe. We're just as proud of those working for smaller companies or developing their own start-ups. The games industry is very diverse and creativity isn't just limited to the big studios. And I like to think Huddersfield students are creative."

> ***"You'll find our graduates in many of the country's major games companies."***
>
> Ruth Taylor, UoH



INFO

Courses: BA Computer Games Design, BSc Computer Games Programming
Established: 2004
Staff: Ruth Taylor *(above)* (Course leader, BA Computer Games Design) Martyn Prigmore (Course leader, BSc Computer Games Programming) Daryl Marples, Duke Gledhill, Casto Vocal, Carlo Fabricatore, Graham Watts, Damian De Luca

Notable alumni:
Ben Hinchliffe (Rockstar Leeds),
Pete Bottomley (Crytek),
Will Eades (RealtimeUK)

JOIN US
FOR THE ROAD AHEAD

We're hiring talent at all levels and across disciplines to make brilliant racing games with us. Codemasters offers you the chance to work on high profile titles, flexitime to ensure you maintain an excellent work/life balance and working environments to suit your lifestyle at our countryside Warwickshire campus or our city-centre studio in Birmingham.

WARWICKSHIRE

We've been making great games at our Warwickshire campus for over 25 years. Today, our HQ has evolved into a cutting edge-facility which plays home to the BAFTA Award-winning Racing Studio, the talent behind the DiRT and GRID franchises and our online community hub RaceNet. Our countryside Warwickshire campus also hosts our innovative Digital Studio and ground-breaking Central Technology team.

BIRMINGHAM

For over five years, Codemasters Birmingham has been home to the BAFTA Award-winning series of FORMULA ONE games and now hosts the talents of two teams: one crafting new FORMULA ONE experiences for consoles and the other creating mobile games. Whichever team you choose, you'll find colleagues who pride themselves on doing great things in a supportive and innovative environment. Codemasters Birmingham offers a friendly working culture in an open-plan, fully refurbished 6th floor office overlooking the city's entertainment district.

FIND OUT MORE ABOUT CODEMASTERS
codemasters.com/blog

twitter.com/codemastersjobs
facebook.com/codemastersjobs

CODEMASTERS®

WE ARE
RACING
!

JOIN US FOR THE ROAD AHEAD

NOW HIRING: GAME DESIGN / PROGRAMMING / ART

PC / CONSOLE / iOS
WARWICKSHIRE / BIRMINGHAM

codemasters.com/jobs
twitter.com/codemastersjobs
facebook.com/codemastersjobs
☎ 01926 816000

CODEMASTERS®

© 2011 The Codemasters Software Company Limited ("Codemasters"). "Codemasters"® is a registered trademark owned by Codemasters. The Codemasters logo is a trademark of Codemasters. All Rights Reserved.